

**The impact of new technology on the news production process
in the newsroom**

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Abstract

The change brought about by new technology in the television newsroom has become a key aspect of the development of the television industry in Iraqi-Kurdistan; since the newsroom has begun to adopt a new automated system, it has particularly shaped journalists' practice and the method of news production within their workplace network. This change has led to the creation of a new form of journalistic practice, particularly with regard to multi-skills, multi-media and multi-tasks within the newsroom network. Hence, these technological changes have provided the news practitioner with more opportunities to obtain a detailed understanding of their practices, interactions and actions.

This research project provides an ethnographic account of newsroom culture and journalists' practice using automation and non-automation systems (see, chapter two distinction) in two Kurdish news channels in Iraqi-Kurdistan. It draws upon in-depth interviews with journalists; non-participant observation and collected documentation related to the research questions.

The current research project is based upon two models: One is Community of Practice (COP)(see chapter 3), developed by Etienne Wenger (1998) and Jean Lave (1991). The COP approach provides a focus on subjects related to the workplace culture, mutual engagement, identity of the members, shared history of learning, exchange of information, experience and shared knowledge. The other is the Actor-Network Theory (ANT) (Bruno Latour, 1992. Michel Callon, 1992. John Law, others), which offers a better means of carrying out an examination related to socio-technical phenomena in the newsroom network (see chapter 3). The ANT approach is suitable for discovering the interactions and relationships between heterogeneous actors (human and nonhuman) in the workplace network.

The research project examines how Kurdish newsroom practice and culture and journalists deal with new technology within the framework of the workplace.

Alongside this, the project addresses the key characteristics and compared automation and non-automation systems when conducting news practice in the newsroom. In this context, the research investigates the roles of journalists in each system and their everyday interactions and practices in their particular circumstances. This study examines journalists' relationships and involvement in their workplace learning, their interaction within their community, their understanding of their practice and the shaping of their production in the newsroom network. In addition, this study looks at the extent to which new technology has a role in improving the skills that journalists need to conduct their profession. To achieve this, the researcher has conducted in-depth interviews newsroom journalists and news workers working for two TV channels, GK and KNN.

The findings show that the use of new technology in the KNN newsroom has had a big impact on the news practice and everyday life of journalists in the workplace, particularly, in comparison with the findings from the non-automation system used in the GK channel. The overall responses to these questions in the interviews reveal that the automated newsroom has impacted on news management production, and has increased the amount of news production, interaction of news workers, and exchange of experience and knowledge within the framework of their environment. However, there was no increase in news production associated with the non-automation system used in the GK newsroom network.

Academic outputs from this thesis

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Dedication

This thesis is dedicated to the following people

My parents

Aran and Yaran

To the journalists who have sacrificed
their lives to deliver the real news

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List of Acronyms and Abbreviations

ANT: Actor-Network theory

COP: Community of Practice

OPP: Obligations Passenger Point

GK TV: The Television of the Kurdish People

KNN TV: Kurdish News Network Television

PUK: Patriotic Union of Kurdistan

KDP: Kurdistan Democratic Party

NP: news producer

SNG: satellite news gathering

NE: news editor

AN: anchor news

NA: news archivist

NO: news organiser

SNP: senior news producer

CNR: chief news reporter

NR: news reporter

SNR: senior news reporter

NW: news writer

CNE: Chief News Editor

AP: Associate Press

CN: Chief of News

CND: Chief News Director

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Chapter One: Introduction

1.0 Introduction

This research project seeks to examine the impact of new technology on the news production process in two newsrooms networks in Iraqi-Kurdistan. The study provides an ethnographic account of workplace culture in two Kurdish news channels, comparing an automation and non-automation newsroom. The key aim of this research project is to explore and compare the role of different types of news technologies – an automation Avid iNews system and a non-automation system in everyday journalistic practice in the workplace. The framework of Kurdish news network provides a number of key factors. These include the recent implementation of state of the art digital news production alongside the existence of older non-automation newsroom formats. This provides a unique opportunity for the researcher to conduct a comparative exploration of the development of new forms of newsroom practice and workplace culture. In this way the researcher was able to make an in-depth overview, observations and gather documentations regard to two different approaches of news-work, practice and culture as well as compare the two different circumstances of news production.

A key feature of this project is therefore to comparatively understand the impact of new technology on newsroom practice and the operation of news production in automation and non-automation systems. Understanding journalists practice in the new digitized environment is important as this represents a vital change in the manner of news production process and the management of the newsroom network. The thesis also examines how practice changes and how journalists interact with the systems and networks. In particular, the mapping of relationships between newsroom members, the forming of news content and news stories, and the connection between the outside and inside of the newsroom network. A key part of this is to study the

community of newsroom network, form and structure of the network, relationships within the network, the construction of the network and the connection between human as well as nonhuman actors/artefacts. In this context the study provides a detailed account of the newsroom culture and recent changes in the workplace, by examining how new technology has impacted journalists' thinking, practices and social values within the newsroom network and workplace.

1.1 Theoretical considerations

This study will use ANT and COP approaches to investigate the effect of new technology on the newsroom environment and news operation process. The Communities of Practice (COP) model was developed by anthropologists Etienne Wenger (1998) and Jean Lave (1991). The COP model provides a focus on issues of workplace culture, training, shared history of learning and shared knowledge between the community members. Newsroom communities of practice offer the members routes and methods to develop their skills, become involved in workplace learning, and exchange knowledge related to their practice and experiences within the workplace. In this manner, the newsroom becomes a focus of social activities and news actions enabling workers to reach their workplace goals. Hence, by engaging in the social activities, the journalists are able to develop an identity within the newsroom community. In this context, the newsroom members share their goals, history of learning and experience in order to develop and maintain their community. The everyday interaction of workers provides the community with a dynamic social situation that can develop journalists' skills, help them to exchange information and knowledge and share stories of their everyday life. Additionally, the new technological tools play an essential role in developing the COP and building the members relationships within their physical or virtual circumstances. For instance, the technological tools, particularly digital technology such as Avid iNews, has the potential to provide the journalists and news practitioners with a better means to communicate among themselves, to exchange information or documents, send messages, make use of database services and to build a virtual community.

The ANT (Bruno Latour, 1992; Michel Callon, 1992; John Law, others) provides one of the best tools to carry out an investigation surrounding socio-technical phenomena in the modern newsroom. The ANT approach is a useful tool for exploring the interactions between technology use and workplace cultures within a workplace network. The use of the ANT approach provides a basis for understating both the journalists' and the technology as actors (both human and non-human) in the practices of the news production network production. The ANT also approach offers the researcher a means to explain the infrastructure of the newsroom network and the shape of the network in the workplace. ANT provides a chance to describe in-depth the connections between the human and nonhuman actors in the newsroom network. Furthermore, this project argues that ANT can propose ontology of news production and the methods used based on the actions within the modern newsroom network. ANT focuses on the explanation of the assembly of a heterogeneous network in the newsroom by understanding the relationships between the different forms of actors and roles and position of each actor in the operation of news production. In this context ANT helps to explore the wide-ranging heterogeneous network in the newsroom community.

The project includes detailed qualitative data about both the automation and non-automation systems in the Kurdish news channels. This qualitative material will help the project to obtain an in-depth understanding of the journalists' practice. This data comes from an ethnographic study that included in-depth interviews, documents and non-participant observation of the journalists' activities in the newsroom. These tools the researcher observed the situation of news practice and process of news production. The project draws on the practical approach to data analysis described by grounded theory, augmented by insights from the two theories. Through this approach researchers are able to obtain a broadly inductive method in order to create a systematic analysis for generating knowledge.

The researcher has worked as a journalist with eight years of practical experience of using both the automation and non-automation systems as journalist. During this period of journalistic practice in the newsroom the

researcher observed the process of news production in both types of workplace. The researcher obtained practical field experience and an in-depth understanding of the process of news production with involvement in many activities and actions in the newsroom network, including his roles as news editor, news producer and news reporter. It became apparent that there is a problem and a gap within the framework of Kurdish newsroom practice in dealing with technology and hence construct in this research project. The choice of the ANT and COP approach helped the researcher to obtain in-depth understanding of newsroom practice and process of production. This is novel research topic in the field of communication and media in Iraqi-Kurdistan. Furthermore, there appear to be no research projects, which directly compare journalists' practice with both automation and non-automation system.

1.2 The research question

Research related to the use and impact of new technology in the newsroom network is limited in Iraqi-Kurdistan, especially qualitative studies. This research project seeks to fill this gap in the field of media literature by focusing on the impact of new technology on the news production process in the workplace network, specifically the journalists practice in the community of newsroom. In this way, the study looks to address a lack in the literature and media studies around the newsroom culture, journalists practice and technology uses in Iraqi-Kurdistan.

As noted above this study seeks to investigate the impact of new technology on the process of news production in the newsroom workplace. The focus of the research is on the newsroom network, culture and practice. In particular the project examines the workflow of the automation and non-automation systems in the newsroom of two Kurdish news channels. The researcher sought to discover, explain and provide in-depth understanding of the following:

1. To explore the impact of new technology on the news production processes within the newsroom network.
2. To assess the interaction of journalists and nonhuman actors in the new automation systems in the newsroom.

3. To study the COP (community of the newsroom) in both automation and non-automation newsrooms.
4. To explain the influence of new technology on the managerial and institutional context.
5. To study the influences of digitization of the newsroom and to make comparisons between the KNN and GK channels.

Through these questions the project sought to produce an in-depth understanding of the newsroom network and news production process, the extent to which new technology has impacted on the process of news production and journalists' practice within the newsroom network. To therefore obtain better understanding of the process of news production and the interaction of the journalists within the context of the newsroom community, including; sharing projects; mutual engagement; journalists' identity; relationships between community members and involvement in learning (see chapter 3). The second question will provide information on the interaction of journalists with the production tools in both the non-automation and automation systems. The third question looks at the main aspect of newsroom practice that is based on the interaction among and between journalists (human actors) and tools (nonhuman actors). This question looks more at the key characteristics of ANT in the newsroom network, in particular providing analysis of the heterogeneous network, connections between actors, translation process and inscription (see chapter 4). The fourth question will examine the key influence of technology on news production and the management of knowledge within the news organization. The last question addresses the use and impact of technology tools in the non-automation and automation systems, specifically how the journalists conduct their practice in these two environments.

1.3 The Politico-Economic and Socio-Cultural Contexts of Iraqi-Kurdistan

1.3.1 Iraqi-Kurdistan

This section provides a brief history on Iraqi-Kurdistan politics, culture, media and the development of the media coverage in the region.

1.3.2 Brief history of Iraqi-Kurdistan and Kurdish issues

The concept of Kurdistan as a Kurdish homeland (Ember et al., 2004, p.215), includes two words, the first is 'Kurd', which refers to the Kurdish people and the second is the 'stan', which means the homeland or Kurdish country. Historically this country, Kurdistan, has been divided between the empire and Persia since the 16th century. From an historical perspective, at the beginning of the 19th century, the Ottoman Empire removed and ended the Kurdish emirates that were established on Kurdistan land, for instance the Emirate of Botan, Ardalan, Soran and the Emirate of Bahdenan. At this stage the Kurdish Emirates ruled their local people and, also enjoyed a kind of autonomy of authority to manage and organise their regions (Eppel, 2008). The general awareness of the Kurdish people of a national identity essentially emerged in this stage. In particular, Ghanea-Hercock et al. (2005) argues that 'the specific conditions of the 19th century Ottoman Empire are significant in identifying the main aspect of the emerging Kurdish national identity' (Ghanea-Hercock et al., 2005, p.319). In the context of the 19th and 20th centuries, Eppel (2008) has argued that when the nationalist movement in Kurdistan started to emerge throughout the Empire, these Kurdish emirates has support as essentially and as a key factor to basis the form as well as notion of the modern Kurdish statehood. Furthermore, this aspect would essentially provide political support for the increasing of the Kurdish nationalist movement (Eppel, 2008).

In the first quarter of the 19th century, in Iraqi-Kurdistan, Sheik Mahmoud Barzinji, as one of the most powerful leaders of the Qadiri community in the area of Sulaymaniya (Meyer, 2009), was installed and appointed as *hukumdar* in November 1918. Nonetheless, Sheik Mahmoud did not succeed in becoming attractive from the viewpoint of the British interests in Iraq at that time.

Following great internal discussion, British officials and policy-shapers decided not to recognise him as the ruler of Iraqi-Kurdistan and they preferred an annexation as part of Southern Kurdistan – the Mosul area (Eppel, 2008). After this period, the Kurdish political movement had grown increasingly in Iraqi-Kurdistan, especially when demanding the rights of the Kurdish community and establishing an independent Kurdish state. One of the most famous Kurdish leader was Mulla Mustafa Barzani' who had led most of the Kurds' revolutions and political movements in Iraqi-Kurdistan since 1943 (Abdulla, 2012, p.93). Also, another famous Kurdish leader was Ibrahim Ahmad who represented the KDP party for long period.

In 1970 the negotiation between the Kurdish party and Baghdad yielded an agreement with the central government for Kurds to have autonomy in Kurdistan. The autonomy agreement did not take long time and agreement to collapse as well as an exchange was negotiated between the Kurds and Baghdad in a settlement after military conflicts, which were proposed between the north and central government. Iraq employed the most brutal ways to gain control over its Kurdish population (O'Leary, 2006, p.192). Mulla Mustafa Barzani led the activities and many operations against the Baghdad government army after the autonomy agreement collapsed. The Iraqi-Iranian agreement has appeared in the March of 1975. The agreement of 1975 made the Iranian Shah stop and withdraw all kinds of support to Kurdish military forces, especially the Democratic Party of Kurdistan (KDP) that fought against the central government in Baghdad, this was the final setback to the Kurdish revolt in Iraqi-Kurdistan (Alam, 1995, p.27).

On 1 June 1976 Jalal Talabani and colleagues issued a statement in Damascus announcing the formation of the Patriotic Union of Kurdistan (PUK)(McDowall, 2003, p.343). The PUK started operations against the central government in Baghdad. In this period Saddam's regime had targeted the Kurdish community directly to remove Kurdish people, culture and heritage in the north of Iraq by use of the army, chemical attacks and operation of mass graves, called Anfal, in 1988. Also, Saddam's regime forces had begun shelling Kurdish villages with ground troops attacks. The consequence of this operation was the destruction of

nearly 5,000 villages (Kelly, 2008, p.31) and also, the total Anfal operation that occurred against the Kurdish community claimed between 100,000 and 200,000 lives (Kelly, 2008, p.32). The genocide operation had a casting impact on the Kurdish community, including 'multiple mass murders, multiple mass disappearances, forced displacement of hundreds of thousands of non-combatants and destruction' of their homeland' (Kelly, 2008, p.32).

The space for the opposition against Saddam's regime to conduct their activity become limited, especially the Kurdish party in north Iraq until the Kurdish revolution in 1991. Hence, the main two parties, the Democratic Party of Kurdistan (KDP) and the Patriotic Union of Kurdistan (PUK) and others conducted their activities in the Kurdistan region. The period behind the Kurdish revolution in 1991 developed the space for work in the field of media and communication, all of the parties in Kurdistan controlled their own media industry, including the local radio, print, online and satellite TV stations.

1.3.3 Kurdish culture and language

Geographically Kurdistan, or the Kurdish country, is one of the most 'strategic and essential areas located in the geographic heart of the Middle East' (Meho and Maglaughlin, 2001, p.3). Historically the Kurdish homeland has been divided between many countries:

'...Following World War I, the Ottoman Empire had to negotiate with Europeans, and in 1923 the Treaty of Lausanne has divided the Ottoman part of Kurdistan between four countries' including Turkey, Iran, Iraq and Syria, and the Soviet Union (Armenia)'.

(Galip, 2015, p.12)

Furthermore, Kurdistan, for the first time, 'has division between the Ottoman and Persian empires following battle of Chaldiran'. (Meho and Maglaughlin, 2001, p.3). This circumstance of the Kurdish community has impacted the form of their culture and their socio-culture. Hence, the political situation of the countries has led to keeping their Kurdish culture divided within the four states. Meho and Maglaughlin argue that:

‘Kurds have been dominated by various differing socio-political and cultural systems, and have been culturally, politically and linguistically fragmented’.

(Meho and Maglaughlin, 2001, p.3).

Thus, the political condition in these countries has impacted the progress of the Kurdish community surrounding their culture and their mother language. The Kurds speak a large variety of dialects; the two main ones are the Kurmanji and Sorani (Kreyenbroek and Sperl, 2005, p.27). In this context, the Iraqi-Kurdistan community speak both of the dialects. Also, related to the alphabet, the Iraqi-Kurdistan is based on the Arabic alphabet; however, in the Turkish part orthnography is based on the use of the Latin alphabet. Through, the Kurdish media industry and broadcasting in Iraqi-Kurdistan is based on both dialects in dealing with information broadcast to the audiences, use of the Sulaimania dialect (Sorani). This predominates the most prestigious in the Kurdish community, in textbooks, print media and others (Naff, 2012, p.185).

The Kurdish community have a variety of religions, ethnic identity and backgrounds; the majority of the Kurdish community are *Sunni*-Muslims and, the minority *Shia*-Muslims (Ember et al., 2004). There are several minority groups of religious practices in Iraqi-Kurdistan, such as Christians, Jewish, Alevi, Ahl-i-Haqq, Yazidism, Zoroastrianism and Yarsanism (Van Bruinessen, 1991). In general, the Kurdish ethnic identity and national identity are stronger than their religious identity, as result of the persecution and ethnic discrimination that the Kurdish people and community suffered over time. After the Kurdish revolution in 1991, the Kurdish media have played an essential role in supporting, protecting and improving the Kurdish identity (McDowall, 2007).

A key aspect of the economic growth in the region is the independent sale of Kurdish oil. In this context, Ahmed (2016) argues that the ‘Kurdistan government region seeks to maintain a politically stable climate for its own economic growth and consideration of autonomy’ (Ahmed, 2016, p.25). This aspect of the economic growth has impacted the development of other sectors, such as the political parties, cultural and media industries of contemporary

Iraqi-Kurdistan. The next section will discuss the development of the Kurdish media and news coverage in Iraqi-Kurdistan from 1991 to present.

1.3.4 The development of media and news coverage in Iraqi-Kurdistan

In this section will briefly outline some aspects of media history before the Kurdish revolution 1991s, especially in relations to Iraqi government. The agreement of 11 March in 1970 between the Kurdish movement and the Iraqi regime provided the Kurdish community some rights including, the use of Kurdish language on radio, television and magazine (Aziz, 2011). This media, in particularly the Kurdish television was in relation to Iraqi central TV, this media has not broadcasts any criticism against the government in Baghdad (Al-Rawi, 2012). In the 1972 the central Iraqi television station added a Kurdish language channel to their program and broadcast that aimed to help the Iraqi government in Baghdad. This in television was in Kurdish language, however it broadcast propaganda in support of the Iraqi government without much focus on Kurdish issues in Iraq.

The Kurdish revolution in 1991 developed and changed the situation in Iraqi-Kurdistan. Al-Rawi, 2012 stated that the 'the numbers of partisan Kurdish TV channels exceeded 20, broadcasting for the northern of Iraq' (Al-Rawi, 2012, p.22). In 1991, the Kurdish parties had established many channels that broadcast in Kurdish language for Kurdish community around world, for instance: (Keles, 2015).

- The PUKTV in Sulymania lunched by PUK lunched in 1991.
- The KTV in Erbil Lunched by KDP lunched in 1991.
- MED TV from London lunched in 1995.
- Medya TV from France lunched in 1999-2004.
- Kurdistan TV lunched in 1999.
- Kurdsat channel lunched in 2000.
- Roj TV lunched in 2004.
- Zagros TV Erbil Iraqi-Kurdistan lunched in 2007.
- KNN Sulymania Kurdistan lunched in 2008.

- GK Sulymania Iraqi-Kurdistan lunched in 2008.
- Rudaw Media Network, Kurdistan lunched in 2012.
- Nuce TV from Denmark lunched in 2012-2013.
- Sterk TV from Noeway lunched in 2012.

This growth, extensively of journalism, has impacted the political parties' media in Kurdistan. Each political party has their own channel. In this context, Gunter and Dickinson (2013) argue that 'since 1991 all Kurdish media outlines have been affiliated with political parties, the Patriotic Union of Kurdistan (PUK) and Kurdistan Democratic Party (KDP) being the most dominant' (Gunter and Dickinson, 2013, p.43). Other small parties have launched their own media channels that express the party's policies and their views relating to the Kurdish issues in Iraq. Since 1994 the Kurdistan Islamic Union (KIU) has published a weekly paper called Yekgirtu (Union) (Ghareeb and Dougherty, 2004, p.376). Kurdistan media and communication is as partisan and all types of media channel belonged to a specific party and there was no independent media.

Since 5 November 2000, the first weekly private independent newspaper was born and published – called *Hawlati* (Citizen) in Sulimanhya city. Further, the television industry was developed in the same year by the broadcast of the first two Kurdish satellite channels, which includes the Kurdsat channel for PUK and the Kurdistan channel for PDK; these two channels have existed since 2000 (Khalil and Kraidy, 2009, p.25). Since 2003, independent journalists and journalism have started to develop and work freely in Iraqi-Kurdistan. The key turning point in developing the sector of independent journalism started in 2003, in particular the military operation Iraqi Freedom opened up many opportunities for freelance journalists, companies and independent media organisations to work in Iraqi-Kurdistan. In this way, the Kurdish media development began from the 1990s as a first stage and then, the second stage started in the aftermath of the 2003 Iraqi war. This aspect of the dramatic change in the field of media practice and converge has impacted the competition between political parties and other media organisations to provide good quality services for the Kurdish community.

This change of the circumstance of the media in Iraqi-Kurdistan allowed the development of news channels and the rebuild into of others based on new digital technologies. In this context, the Kurdish 'broadcasting channels, in particularly in the form of satellite news channels, has dramatically increased and brings great competition between each other in the Kurdistan region' (Galip, 2015, p.84). In this way, the GK news channel belonging to the PUK politics group was the first Kurdish local channel that had broadcasted since 1991, and then in 2008 became a satellite and global news channel. The KNN news channel was born in 2008 based on the new digital automation system and this channel belongs to the 'change party in Iraqi-Kurdistan'. The next two sections will provide more about these two news channels.

1.3.5 Current Kurdish media context

Following the Kurdish revolution in 1991, the Kurdish community faced many changes and challenges, particularly, building a new society on new principles, which are appropriate to the new circumstances. A key area of these changes occurred in the field of media and the rebuilding of the Kurdish media. The two main parties, the Kurdistan Democratic Party (KDP) and the Patriotic Union of Kurdistan (PUK) attempted to establish many different media channels, including radio, TV and newspapers. In this section I will focus on the one of the most important Kurdish media developments in this period, namely the first Kurdish television channel established after the revolution of 1991.

1.3.5.1 GK channel

The history of GK channel is divided into two phases the development. The first period spanning from 1991 to 2008 saw the focus on local television news production when the channel covered local news for a local audience. The second period has lasted from 2008 to the present in the form of a satellite news channel, which focuses on broadcasting news programmes for an international Kurdish audience. In these two phases the channel fundamentally changed many aspects of its news practice as well as the framework of news production (NP, Interview, GK channel, 12 Dec 2013). These changes were

conducted particularly to move from public TV to a news channel and also, from a local broadcasting company to global and satellite broadcaster.

The GK news channel belongs to the Patriotic Union of Kurdistan (PUK), one of the main parties in the Iraqi-Kurdistan. This channel was launched at 3 March 1991 (Namiq, 2010) as a local TV broadcaster at that time. The key aims of this channel are to broadcast variety of programme for the Kurdish community, including news, arts, politics, health and support for the democratic concepts in the Kurdish community. Also, the GK channel was broadcast in three languages, Kurdish, Arabic and Turkmen. In this period the channel was for the local community and they had limited ability to produce TV material.

The second phase of the GK channel saw it launched as a satellite news channel on 01/06/2008 in Sulimanya city, Iraqi-Kurdistan. The GK news channel was based on non-automation system; it had its own characteristics with more than 19 news programmes throughout the day. This channel broadcast news programmes from the central station in Sulimanya city, including news interviews in the studio, live broadcasts from events and debate programmes. Also, the GK channel had a wide network of correspondents and offices for broadcasting programmes in different cities around the Kurdistan region.

The GK channel now includes seven departments, namely the news department, relationships, programme making and production departments, design and also, the technical department. This research project will focus on the news department. This department consists of more than 100 employees. The work system in the GK channel is based on the two shifts, the first run from 8am to 4pm, and the second runs from 4pm to 12 midnight. The GK channel has more than 60 news correspondents around the Kurdistan region.

1.3.5.2 KNN channel

KNN refers to the Kurdish News Network launched in 2008, and which belongs to the Wsha Company. The first broadcast began on 31st Dec 2008 and it was the first independent news channel in the Kurdistan region, although some of the workers in the channel stated it was close to the (Goran ('change'))

Movement or opposition party (NP, Interview, KNN channel, 16Dec, 2013,). The key focus of this channel's activity was on news programmes and investigation of issues, political news, economic in-depth interviews and subjects related to corruption in the Kurdistan region. The channel has more than 170 employees, including the journalists, news producers, news editors, news anchors, technical workers and administration. Also, the channel has many news reporters, correspondents and offices in many Kurdish cities around the Kurdistan region in Iraq.

The key approach of news practice at the KNN channel is based on the criticism of government projects and reports on a variety of topics related to reform in the Kurdish community. This characteristic makes the KNN news channel different from others in its style of news practice and covering news events. Since its establishment, the channel has provided a great amount of news service and news programmes, as well as interviews and coverage of many events. The practice at this channel is based on a new digital automated system, namely Avid technology. The newsroom system provides many facilities for the journalists to conduct their practice and manage the news production process.

The aims of the KNN news channel are to support transparency in government projects, promote reforms in government institutions and the political system, social justice in the Kurdish community, criticism of administrative corruption, support for the democratic system, provide the Kurdish audience with accurate information and supporting the freedom of expression.

The KNN channel structure consists of three key departments. First, the council administration includes, the Head Director, Assist of Head Director and those responsible for the departments. The key task is to determine the channel's plan in the long and short term. The second department is the administration that focuses on the management of journalists and employees' requirements. The third is the news department supervision of the news operation and production in the newsroom network. This department includes, the news producers, news editors, news anchors, news programme makers, online news and documentary

unites. This department also includes the art unit, which consists of directing, lighting, camera, design, graphics, and archive and sound units among others.

1.3.6 The distinction between the “non-automation” and “automation” systems.

This section will provide a general definition and distinction of ‘automation’ and ‘non-automation’ systems within the newsroom. This is the key distinction between the system at KNN and GK channels. The first part of this section will discuss the digital automation of the newsroom, which is fully digitised and integrates all elements together in the workplace. For instance, in the case of the KNN channel, the newsroom is designed to manage all aspects of the process of news production, via a networked integration of all equipment and data processing in an automated news production workflow. This newsroom networking is based on a digital automation system or application software of the newsroom network, called Avid technology. Other brand-names, for instance are; Autocue from Autocue Holdings; ENPS (Electronic News Production System) from the Associated Press; NewsKing from Comprompter; and Open Media From Dalte (Keirstead, 2004, p.19). However, the second part of the section will provide a definition related to the older non-automation system, such as in the case of the GK channel. This type of newsroom is not integrated together, not fully digitized and the workplace is not networked like the automated newsroom system.

1.3.6.1 Automation system production and nonlinear editing

This section describes the automation system where all equipment integrated together in the same digitisation network. In the automation system newsroom, the news crew uses a single integrated computer system to conduct their everyday practice (Keirstead, 2004). Through the automated system, news practitioners are able to make connections and links between a variety of desk stations within the workplace in the same platform or virtually.

In this manner, Jones et al. (2013) stated that the newsroom automation system is:

‘...The dynamic collaborative work environment in which news journalists, photographers, producers, directors, copy runners, and a host of other support staff run their entire news creation, production, and newscast enterprise presents particular challenges for automation systems, which are quite different from those for master control automation’.

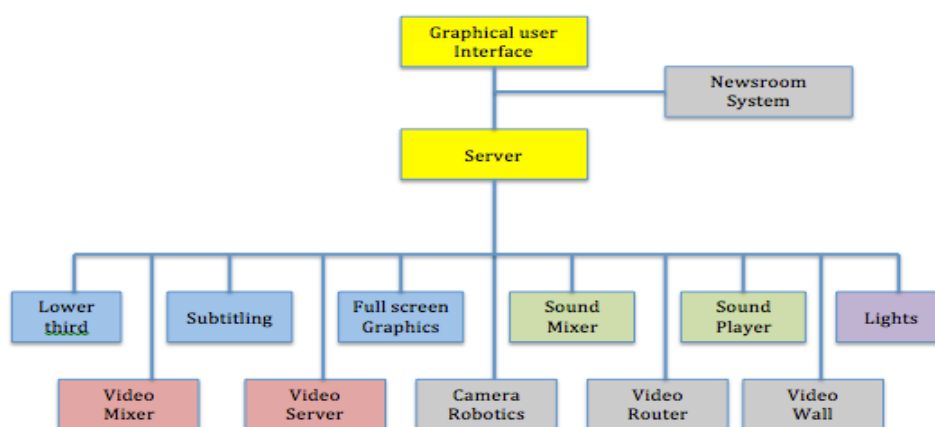
(Jones et al., 2013, p.1233)

In this respect the automation system, such as the Avid technology in the KNN newsroom, allows the journalists to ‘monitor incoming news agency, write news stories, work on a rundown list, access the Internet, and access audio or video clips and their network’s archives from their desktop’ (Meadows, 2007, p.16). Hence, this improvement and development of the newsroom workflow has delivered new ways and techniques in dealing with news production.

It is creating a ‘networking workplace’ (Keirstead, 2004) where ‘newsroom computer system, play out centre, and media devices such as video or file servers also, the automated system is connected to external sources through the IT-networking systems’ (Todorovic, 2014, p.219). This aspect of the automated system provides the journalists more flexibility to work, manage their tasks and conduct their news practice faster.

The system provides the news crew in the control room with the ability to control all devices through an integrated system. This equipment includes the camera within the news studio, the autocue technology, lighting tools, and audio mixer, well screen technology as well as all these devices integrated together in the digital technology networking. Further, in the control room the news director is able to connect with other units of the station, including the newsroom hub, archives network and graphic devices easily and more quickly, especially in the transformation process. In this way, Todorovic (2014) argues that ‘the smooth operation of the system is based on the use of various software solutions, which create a unified user-friendly system out of a plethora of

different devices and subsystems' (Todorovic, 2014, p.219). This means that the digital automated system in the newsroom establishes essential links between the workplace technology equipment and human actors within the newsroom community or virtual community. This diagram provides the shape of the network connection and communication in the automation system in particularly case of the Mosart system. Through this aspect, the system able to control other part of the newsroom network (Mosart, 2017).



Automated broadcast system and communication devices: Accepted by Mosart
(number 1.1)

Here, this practical example will attempt to provide an explanation surrounding the change that is delivered by the use of a new automation system in newsroom networking. It shows how the automation system has integrated a technology package simplifies the production workflow in order to deal with live broadcasting or recording packages. In the example provided by the Avid technology website, there is detail on creating news items in the field and how the journalist or news reporter has access to the newsroom hub network and feeds the news producer their story script (Online video, Avid, 2016).

The news reporter's everyday tasks and responsibility are acquiring the information, writing news stories, interviewing people and joining in the field for live broadcasting. Then, the news reporter goes back to the station, in order to conduct their final checking process for the news script and their news story. Automation systems, such as Avid technology, provide news practitioners with

many tools and equipment integrated. For instance the news reporters have a field i-Pad to access the newsroom networking. Through the field i-Pad, the news reporter is able to access the newsroom automation system and make their news script available for the news producer and for monitoring by other news workers (Online video, Avid, 2016).

Hence, the news reporter is able to log in to the i-news central (the automation newsroom network) in order to update the news story script, writing up new scripts and finding out about their assignment's progress. In this production workflow, the news practitioner is directly able to add a voice-over and new media objects to the system. Also, in relation to this, Austerberry (2004) argues that the 'video and audio objects can then be transferred to a nonlinear editor for craft editing' (Austerberry, 2004, p.126).

Further, the Avid technology provides the news reporter with a great opportunity to write up their story script and the news producer has full awareness of the content of the news item before the practitioners get back to the news station. This aspect of the automation system saves time for the news crew, is more efficient and a good way to manage the news items. Through these facilities the news editor and news producer are able to see the content of the news story in order to prepare breaking news. This aspect of the automation Avid technology is a core factor intended to make the news reporter's workflow easier and more efficient. Also, it makes the news producer's workflow simpler and more manageable (Online video, Avid, 2016). Further, Jones et al. (2013) argue that the digital workflow provides the journalists with great capabilities to manage their news practices, in particular, the automation system, includes:

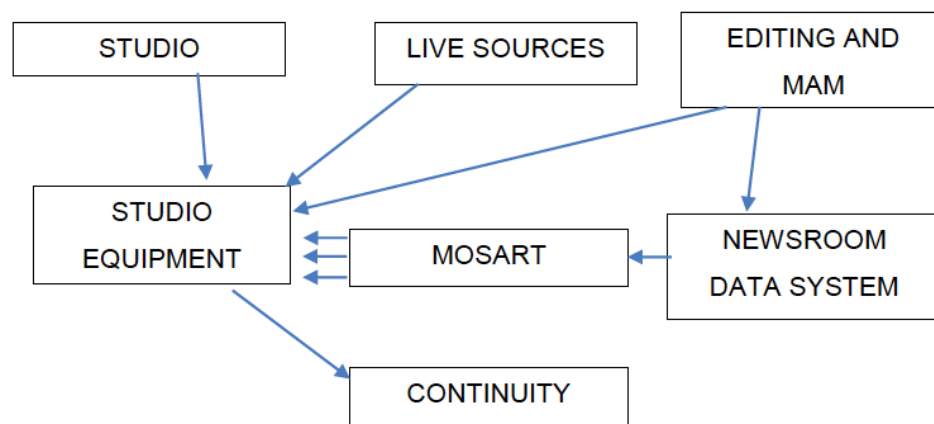
'...Digital video servers for content creation in shared collaborative environments, nonlinear video editing, digital low-resolution proxy browsing, shot listing and editing, integrated digital graphics production and robotic cameras'.

(Jones et al., 2013, p.1233)

The digital automation system mainly depends on nonlinear editing process and procedures of news production. Pavlik (2001) argues that the nonlinear editing

means that the journalists are able to conduct things in a number of sequences, including dealing with the storyboard of a news item, adding audio track and footage editing, rearranging the footage cut and pasted and mainly dealing with digital storage of news items (Pavlik, 2001, p.107). In this context 'the using of nonlinear editing systems, means that editing off the server has to be non-destructive' (Tozer, 2004, p.666).

The automation system provides many benefits for the journalists that work within the newsroom network, especially the production workflow and workflow management. Hence, the automation system in the workplace offers crucial approaches to produce news and efficiently involves the news procedures in the newsroom networking. This diagram demonstrates the modular structure of the Mosart system and design of the architecture workflow. This aspect of the system allows practitioners opportunities to change broadcast hardware devices without conducting any modify in the main rundown (Hussein, 2015, p.18).



Architectural system workflow: approved from Mosart

(Number, 1.2)

In the newsroom automation system and workplace networking, there are many aspects that help the journalists to establish their tasks. As Keirstead (2004) noted:

'The newsroom computer system vendors now include Internet software in their packages, including software that transfers the

news program script (and in some cases, audio and video) to the Web page. Major networks not only send their scripts, they create additional information for viewers who want to know more about current topic’.

(Keirstead, 2004, p.148)

The Avid automation system used in the KNN newsroom network provides essential tools to organise many series of the news assignment, production stages, procedures of news management, news tasks and news practice in order to produce. This aspect of the automated system is called the production workflow, which includes ‘ key stages for instance, the media ingest, media staging, search and logging, editing and collaboration, asset management, delivery, broadcast and distribution (Booth, 2016). Furthermore, the automation system provides key mediating tools for the journalist to handle the information, audio, capture the footage, voice-over, editing process, archiving, play out management and automate broadcasting. In this respect Pavlik (2001), argued that the ‘Avid system enables the newsroom to “get out of the linear age”, in this manner, the technology will offer time saving and increasing versatility’ in conducting news practice within the automated newsroom networking (Pavlik, 2001, p.107). In this manner, Shrivastava (2009) argued that the ‘nonlinear workflow makes the newsroom far faster than tape, more efficient than linear processes and more productive’ (Shrivastava, 2009, p.105). The next section will provide key information surrounding the non-automation system, in particular the case of the GK channel.

1.3.6.2 Non-automation system and linear editing

This section will present key information related to the non-automation system especially in the GK case study newsroom. The non-automation newsroom is based mainly on the linear system and non-integration of the equipment within the workplace networking. In the linear editing system journalists directly deal with videotape editing device techniques (Keirstead, 2004). In this context, Keirstead (2004) stated that ‘once the script is written, it is available to video editors that are working with videotape’ in order to conduct their editing

(Keirstead, 2004, p.22). This means that the journalists in dealing with the linear editing system have less flexibility in conducting their news practice and production workflow than in nonlinear digital system.

Another aspect of the GK newsroom workplace is that there is no networking system available to control the process of news practice and production workflow, such as the automation system. This means the journalists have limited ability and skills to organise the news operation and their news practice. The GK newsroom does not use any automation system in the production workflow, especially in both aspects of the content ingest and play out of the news production (Jones, 2005). In this way, Herbert (2015) argued that the 'traditional journalistic writing was based on the linear storytelling' (Herbert, 2015). Further, this kind of newsroom has a non-metadata based catalogues, the journalist is not therefore able to conduct efficient research for the data and information within the workplace network and, also, they have limited ability in dealing with the archive storage (Mauthe and Thomas, 2004). In this manner, within the non-automation system newsroom, the journalist is not able to conduct shared news practice, obtain direct feedback from other news workers and dealing easily with the news archive. In this context, Garrison (2013) argues that the implementation of new technology in the broadcast newsroom plays an essential role in transition and creating new jobs for news practitioners.

In the non-automation newsroom, such as the GK channel, the process of editing is based on videotape editing and linear operation. In this manner, the process of linear editing requires monitors and tape machines that are used by the footage editor to create the master of the item (Silcock, 2007). Whilst the delivery of the new technology to the newsroom network has changed the routine of the journalists' practice from a linear system to a nonlinear digital system editing and makes it more flexible (Smith, 2013), also, the broadcasting process has changed and been introduced as transitioning from tape to digital disk station news practice (Hussein, 2015).

In the GK newsroom, there are no newsroom software applications, such as Avid technology or others (see chapter 7).

Additionally, in the GK newsroom and non-automation workplace network, there is no Internet network in order to set up the connection between journalists within their environment. In this way, the journalists have limited opportunity and ability in dealing with the news package, viewing the items, obtaining the feedback, managing automated rundown list of news and automating the news script list.

Within this thesis the researcher will define the KNN newsroom network as an automated, fully digital system and integrated workplace. GK newsroom is defined as a non-automated, linear system, which has some digital elements not integrated into newsroom system networking.

1.4 The significance of the research

The research project is significant in that it is the first to adopt a combination and examination of and between two theoretical approaches, ANT and COP in the field of media practice. The choice of the non-automation and automation system of Kurdish news channels is another important aspect of the present research, which enabled the researcher to compare between two different environments and communities within the news production industry. This research examines the emerging role of new technology in the context of newsroom networks, in particular related to the journalists' practice, involvement in workplace learning, negotiation of meaning, role of key actors and translation process in the network. Therefore the study sets out to assess the effect of the digital automated system and non-automation system on the journalists' practice.

The ANT and COP models provide the researcher with a better understanding of the many connections between the members of the newsroom network, and the interactions and process of creating a news package. Through these two models, the researcher observed the news action closely and gathered information on the journalists shape their news package and their goals within their framework of practices. Furthermore, the research project will shed light on the role of automation systems in supporting news activity and how this allows the

journalists to perform their everyday practice despite this lack of experience. These aspects of the research have great implications for determining the form of journalists practice and shaping the news workers' behaviour within the network.

The significance of the study is also in comparing the use of new technological tools in the modern newsroom between the automation and non-automation systems. Also, it hopes to offer reasonable solutions to the problems that journalists are facing in the newsroom community and everyday practice. In this manner, the researcher attempts to contribute and develop a new conversation surrounding the information management system in the newsroom, in particular within the field of news production and media studies. Also, the thesis attempts to evaluate the performance of the journalists in dealing with new technology in the newsroom. This type of research project is original in the United Kingdom, Middle East and Kurdistan. Media researchers are not yet able to design and conduct this creative combination effectively, specifically between the sociology and anthropology theory.

1.5 The thesis outline

The structure of the thesis will be presented in nine chapters, the first chapter being this introduction. Chapter two presents a review of the literature and basic information on the impact of new technology on the newsroom. it reviews information on journalism and technology changes in historical context, including changes of technology in Newspaper, Radio, Television and Online journalism. It examines the impact of new technology and digitization in the modern newsroom, newsroom computerization, knowledge management in the newsroom and the changes in editing tools. The chapter also examines the key human actors and news practitioners in the newsroom network it describes the role of each human actor in the newsroom network and the process of news production. With focus on two key workplaces in the station namely the studio and control room. Chapter three discusses the concept of COP and how this can be applied to the context of the newsroom network. It examines the keys

aspects of COP including; practice; community; identity; negotiation of meaning; and the learning process within the context of newsroom community. The chapter provides discussion criticism of COP for both virtual and face-to-face community. Chapter four will examine the ANT in the context of the newsroom workplace. The chapter describes the main aspect of the approach, namely; the translation process; inscription; stabilization; information management system and the relationships between the actors within the network. Throughout this chapter there will be an analysis of the news practice and newsroom network according to the ANT approach applied to the field of the news production network. The chapter will describe key aspects and criticisms of ANT approach. Chapter five addresses the key shared links between ANT and COP in an attempt to answer how these two concepts work together in the field of the newsroom network and how these two models contribute each other within the newsroom practices. Chapter six will examine the rationale behind the methodology and methods used to gather the field data and analyse it in the context of the present research project. The key methods used in the context of this research for data collection includes; in-depth interviews with the journalists in the newsroom network, as well as non- participatory observation of the journalists' activities and actions within the network. Alongside the gathering of documentation related to both cases. Chapters seven and eight provide a qualitative data analysis that based on the grounded theory, for both KNN and GK channels. These two chapters include analyses of fieldwork data and qualitative interviews.

The main topics related to the GK newsroom network are:

- GK newsroom's technology context
- The understanding of news work
- The news producer in the newsroom
- The relationships of journalists in the newsroom
- The journalists workshop in the newsroom
- The news editor in the newsroom
- The professional skills of news anchor

- The skills of journalists and news footage
- Daily discussion negotiations and this daily meeting
- Daily work and practices in the newsroom

The main topics for the KNN newsroom network including;

- Technology use and news practice
- The operation of news production
- The everyday journalists practices in newsroom
- The news producer
- The news editors in the newsroom
- The journalists experience and identity
- The skills of the news worker
- The visual skills of journalists and news item

Chapter nine concludes and presents the findings of the current research, in eight key sections. The first section presents the key findings related to KNN and GK channels. The second section offers a reflection on the theoretical aspects of the findings, specifically the implications of the COP and ANT models in the newsroom network, while analysing the implications of the two theoretical approaches implemented in the research project. The third section reviews the combination of COP and ANT models perspective regard to the skills and training of the journalists. The fourth section will provide reflections on how the both models relate to the practical aspects of the newsroom network. The fifth section discusses the key contribution of the thesis to wider field of the study of journalism and technology. The section six will offer some suggestions for future research in the field of communication and media, with specifically reference to the topics situated in the current research. The section seven will provide key contribution of the thesis to journalism in Iraqi-Kurdistan. The final section will provide the key recommendation of future studies in this field.

The chapter 3 and 4 will describes COP and ANT models in-depth, there are a key concepts need to be point out now one of the ideas different between human and nonhuman actors network, translation, heterogeneous network.

Chapter Two: Overview of the impact of new technology on the newsroom

2.0 Introduction

This chapter will examine the previous work on the impact of new technology on the processes of news production, news crews and the workplace in the television newsroom. In particular, the research will consider the effect of automation systems upon newsroom practice, news production and the workplace. The literature related to this study will present an overview of the digital newsroom and provide the key justifications for undertaking this research project.

The chapter has the following four parts. First the chapter will present historical context of journalists and technology changes. Second, it will look at the conceptual context of the impact of new technology on digitisation, computerisation, knowledge management and changes to editing operations in the newsroom. The third part will discuss the impact of new technology on the key news crew roles in the workplace, such as news producer, news director, news editor, news reporter, news presenter and news graphics artist. The final part of this chapter will discuss the workplace, particularly the news studio and the news control room, and the technology tools used in these two workplaces.

2.1. Journalism and technology changes in historical context

This section will present the historical context of technology and journalism in the field of media; provide a short discussion of the relationship between journalism and technology development. It briefly considers the long history of engagement between technology in the fields of media, including the newspaper, radio, television and online.

2.1.2 Newspaper and technology change

From the emergence of the printing press in the mid 15th century in the Western countries there has seen a fundamental development and of printing into a master art form (Hernandez and Rue, 2015). The substantive

development of journalism and the modern of newspaper had taken place by the end of the 19th century. This was simplified by the use of the 'cheap, vast quantities of wood pulp paper, automated printing presses, typewriting and typesetting machines' (Gaudreault et al., 2012, p.383). This delivered a new form of professional practice for the journalists of accurately, objectively reporting and new ways of wide spread newsgathering and distribution in widely using the telegraph (Gaudreault et al., 2012). In this context Randall (2007) argues that: 'A newspaper's role is to find out fresh information on matters of public interest and to relay it as quickly and as accurately as possible to readers in an honest and balanced way' (Randall, 2007, p.25). Fenton (2010) argues that the 'news journalism as contributing vital resources for processes of information gathering, deliberation and action' (Fenton, 2010, p.3).

In this historical perspective scholars in this field indicated the pioneer of the tabloid newspaper in Britain, the owner of the Daily Mail, Alfred Harmsworth. In this context, Conboy (2011) claimed:

'That modern journalism began in 1896 – on 4 May 1896 to be precise. This was not because of any single innovation in format or technology but in the way that Alfred Harmsworth's Daily Mail, launched on that day, managed to draw a complex range of technical, commercial and textual features into one publication'.

(Conboy, 2011, p.8)

In this respect, the same author has argued that Harmsworth transported and developed the old form of the daily newspaper to a new form in the 20th century. In this way, Harmsworth had an essential role in renewing and modernising journalism and the newspaper innovation process (Conboy, 2011, p.8). Modern journalism and news practice changed by the end of the 19th century, this aspect impacted on the way of work and news practice as well in this field of media (Clayman and Heritage, 2002). Moreover, Eadie (2009) argues:

'...Modern journalism has a predecessor in pictorial journalism in the middle of the 19th century shortly after the introduction of

photography, illustrated newspapers appeared in each of the Western countries beginning with Great Britain’.

(Eadie, 2009, p.32)

Grøtta (2015) argues that: ‘the rise of the commercial newspaper in the nineteenth century was a media revolution heralding today’s media situation in every aspect’ (Grøtta, 2015, p.24). Anderson et al. (2016) argue that ‘throughout the twentieth century as politics, economics and technology changed, journalism changed as well’ (Anderson et al., 2016, p.162). In this context, Griffiths (2015) argued that the new technology is an essential element of the requirement of the contemporary newspaper production and this aspect has become a great part of the contemporary system of journalism (Griffiths, 2015). Hence, technology changes have impacted the content and the form of newspapers and also affect the professional practice of the journalists within their everyday environment.

The dramatic changes in the field of journalism have connected directly to the development of new technology, in particular the digital news package into a more contemporary online presentation format (Hernandez and Rue, 2015). In this context, Usher (2016) argues that skills improvement and subspecialty has emerged from the integration of a variety of elements including the photography, graphics, maps, data visualisation, design, the way of illustration and computation of modern journalism. These aspects of news journalism intersect in a variety of methods and ways, which support the new shape of interactive journalism in the digital age (Usher, 2016). Rudin and Ibbotson (2002) identify that technology changes in the field of journalism and newspapers are linked to the delivery of computer and software systems, stating that:

‘The impact of this technology and the change in working practice in the newspaper and magazine industries is clearly evident in the use of computers and associated software packages in producing newspapers and magazines’.

(Rudin and Ibbotson, 2002, p.78)

Hence, modern journalism and the newspaper have been associated with the development of new technology used in creating a new style of journalistic and professional journalism practice. In particular, the way of presenting information, designing the newspaper and distribution for the public interest. The next part will briefly present the development of radio journalism and technology development.

2.1.3 Radio and technology change

This section discussed radio journalism in relation to the development of media events in the 19th century. In the 20th century provided radio journalism with a major role and function in order to cover war news, especially live broadcasting. Caron et al. (1995) argued that 'during the First World War, radio grew up and became adult' (Caron et al., 1995, p.37). Leading popularity to the radio over newspapers as a means of communication, Temple and Temple (2008) stated: 'When war was declared, "people switched on their radios and got quicker and more accurate information" than they did from their newspapers' (Temple and Temple, 2008, p.43).

Starkey and Crisell (2009) claim that radio journalism is an essential activity of media, which is fundamentally connected with newspaper, magazine and television broadcasting development in the 19th and 20th centuries. In terms of the media history, the radio as a means of communication was more than a pioneer to television in the 20th century (King and Chapman, 2012). Sommerville (2012) argues that:

'Radiotelegraphy had speeded communications, enabled newspapers to get news more quickly and facilitated the faster spread of information. Telegraphic messages had to be typed out and distributed'.

(Sommerville, 2012, p.33)

Additionally, King and Chapman (2012) argue that 'in terms of the way news was received, a new culture of domestic intimacy for the audience'. In this respect and over the years of progress, the radio as an essential tool of

communication has survived changes in technology, and this aspect has allowed the medium to frequently reinvent itself in this field (King and Chapman, 2012, p.64). This means that the development of technology has an impact on the means of radio journalism workflow and practice. Also, the changes of radio journalism have connected to the advanced use of new technology and computer systems in everyday practice. In this context Conboy (2012) noted that the 'technology brought journalism into existence and that journalism is very much defined by its continuing ability to react and adapt to changes in the technological environment' (Conboy, 2012, p.148). In relation to the changes and progress of circumstance of the technological tool in radio journalism, King and Chapman (2012) stated that:

'...urbanization and greater mobility , combined with the impact of the war world war on both technology and change attitudes, had led to a new social environment with demand for improved communication systems'.

(King and Chapman, 2012, p.64)

Gazi (2011) connected the changes in radio journalism with many others factors that include removal of work regulations, the cancellation of the monopolies and the decentralisation of radio for working and broadcasting. Furthermore, Gazi (2011) referred to other elements that affected the radio journalism, stating that:

'...strong competition for public radio from commercial broadcasters, the dominant position of television, changes to modes of listening to radio and, finally, revolutionary changes in radio production and distribution technology have been the major driving forces behind changes to the medium of radio in recent years'.

(Gazi, 2011, p.9)

In the 21st century, radio journalism has seen dramatic changes and development, especially with delivery of new communication tools to radio,

development of the production workflow, model and, also, the revolution of the dynamic digital radio (Siapera and Veglis, 2012). Hence, the technological changes and new tools have significantly supported Radio journalism reach nowadays and the creation of the wide range of audiences around the world.

2.1.4 Television and technology change

This section will devote itself to discussion of the history of television development and technology changes in television journalism. One of the most important and influential creations for the audience in the 20th century is television. During the 1930s, American engineers struggled and they attempted to create television that was realistic for people (Batchelor, 2008). Sterling and O'Dell (2010) stated that 'at the end of the 1920s established a laboratory in Camden to develop television, ten years later, Sarnoff introduced RCA's electronic television to a mass audience in June at the 1939 World's Fair in New York City' (Sterling and O'Dell, 2010, p.639). Furthermore, at the beginning of the Second World War, in 1941, the United States entered the war and RCA plants turned the television into a war production, by creating tubes, sound equipment and radar (Sterling and O'Dell, 2010). In this way, the American scientists and engineers, especially the RCA, played a great role in the development of the radar, sonar and, also, the use of television for war purposes. In this manner, David Sarnoff stated that 'the potentialities of television-directed weapons seem to be of the greatest importance' (Abramson, 2002, p.3). Also, in connection with the importance of the television in our everyday lives and, at that time, Sarnoff stated that 'within five years, television would be as much a part of our life as radio had become' (Barnouw, 1990, p.65).

At the end of the 1940s commercial television arrived and became a reality that was available for the audience (Stephens, 1998). In this context, Miller (2003) stated that 'the transition to television broadcasting would have occurred quite generally in the late 1930s and early 1940s' (Miller, 2003, p.56). With the first commercial television and public services established in Britain in 1936 and across America in 1939 to 1941 (Jin, 2011, p.89). In this manner, and related to the situation of the television industry and financial aspect in the United

Kingdom, Dunnett (2011) argues that the American television industry has followed on from the British methods and that:

‘The major developments in British television history were the start of regular broadcasting by the BBC in 1936; the introduction of commercial television in 1955; the introduction of colour television and a 625 line system on BBC2 in 1967’.

(Dunnett, 2011, p.118)

In this respect television has grown up increasingly and impacted on the social and cultural aspects as well as the emotion of the average viewer of the audience in various ways (see Dunnett, 2011, p.118) both – internationally and nationally. Straubhaar (2007) argues that ‘the new technologies for producing and distributing television have expanded to almost all countries in the past few decades, enabling a number of new channels to appear’ (Straubhaar, 2007, p.2).

Colour television were one of the most important changes in the 20th century. In this manner, Gref (2010) indicated that ‘CBS established a limited network broadcasting color television in 1950 and went into production of color TVs in early 1951’ (Gref, 2010, p.38). The change has continued in the field of television development. From the 1970s to the mid-1980s, the dramatic change happened in the radio and television networks by use computer system in production. Hence, Borins (2007) argued that ‘the personal computers were first installed in 1981, and the Office Automation System and Information Services (OASIS) network that was introduced in 1985 supported the distribution of computer data’ (Borins, 2007).

With regard to the development of the HDTV, Ward (2003) stated that ‘the first development work on a high definition television system began in 1968 at technical research laboratories of Nippon Hoso Kyokai in Tokyo’ (Ward, 2003, p.98). Also, in the beginning of the 1980s ‘NHK pioneered developments of the High Definition Television (HDTV), with 1125 lines/60 fields scanning standards by 1986’ and illustrated that their high definition television should be transmitting during the 1986 Seoul Olympics (Dhake, 1999, p.616). Then, as well as the development and use of the first satellite networks: ‘in 1991 the US

Cable News Network (CNN) satellite broadcasted live coverage of the Gulf War' (Walsh, 2006, p.258).

Delivery of the new technology and computerised management in the television station has changed many aspects of this invention, in particular the way of broadcasting messages, transmissions, conducting practice and production methods. For instance the use of the desk computer services that are based on the newsroom automation system has provided journalists with many opportunities to conduct their news practice in flexible networking, production workflow and simplify the news operations.

2.1.5 Online Journalism and technology change

This section will discuss key technological changes and development of online journalism. Historically, online journalism was created, for the first time, as a form of teletext in the United Kingdom in 1970, this Teletext format was patented by the British Broadcasting Corporation (BBC) in 1971 (Kawamoto, 2003, p.32). Furthermore, during the period of the 1970s, the British Telecom research laboratories had an interactive videotext service (Jackson and Townsend, 2014, p.62). In the context of creating the teletext and videotext innovations, the first videotext system, Prestel, was established in England in 1979 by the British telephone authority. Moreover, the French and Canadians followed on from this period and Canada launched the same system, which was called the teli-don videotext system; in particular this videotext system used interactive information services (Rogers, 1986). The development of the PC in the 1980s established an advanced movement in the networking technology with dial-up online services. Future technological changes came with accessing the Internet and World Wide Web in the public sector (Singh, 2004, p.2-3).

The modern form of online journalism was created, edited, shaped and distributed by the Internet. The term of online journalism means the news item content available and accessible via the Internet. News Websites became accessible for users in the 1990s (Friend and Singer, 2015). Lynch (2013) argues that the 'Internet makes it possible to deliver information anywhere to anyone who has access to a computer, a smartphone or other advanced

technology' (Lynch, 2013, p.44). These changes and the uses of computers and the Internet have impacted on journalism production and how journalists practise in many aspects (Henderson, 2009, p.259). Jakubowicz and Sükösd (2008) identified 'the biggest impact of the Internet and World Wide Web on journalism is expressed by the emergence of online journalism' (Jakubowicz and Sükösd, 2008, p.205).

In this respect, the unique characteristic of the technological changes and innovation has provided a significant changes to journalistic work and practice in their areas, in particular in dealing with the audience. In this context, Aggarwal (2002) discussed the key ideas of the changes, specifically in dealing with audience, in this manner stating that:

'The technology of online journalism makes a marked departure from the mass targeting technology to an individualized technology that has the potential of reaching out to a greater audience without being insensitive to the idiosyncrasies of the individual news consumers'.

(Aggarwal, 2002, p.33)

Siapera and Veglis (2012) argue that the 'Web technology has provided opportunities for source and audience to participate in news production' (Siapera and Veglis, 2012, p.59). This aspect of the technological changes in online journalism and journalistic practice has provided a move toward dynamic information production and the online consumption of the audience (Siapera and Veglis, 2012).

The technology change has accelerated the journalistic practice, online production, event coverage and online journalism in many aspects. Franklin (2005) stated that:

'...By 2009, online journalism has fully emerged as a significant platform for news, but it was not yet fully formed. Like newspapers in the 1830s, and television in the 1960s, online journalism already has had significant social impact and serves as

an important platform for people to learn about the world around them’.

(Franklin, 2005, p.85)

In this context, the Internet as an essential medium provides great tools for people to communicate directly. Journalists also gain the ability to conduct their breaking stories at any time and provide information updates in their news production (Craig, 2010). Hence, scholars in the area of online journalism have emphasised that the new technology has changed the journalists’ practice and format of the news item. Also, they indicated that online journalism has continued to address these new tools key elemental forces behind change to journalists’ practices. However, the researchers in this area of study expect a greater concentration on the audience (Franklin, 2005). Thus, in the current situation of the technological changes and developments, the practice of online journalism has changed to be more interactive than before. With a focus on simple design, interest and clear content, and, also, high quality of visual aspects that make it more interactive and give more options to the visitor (Craig, 2010).

2.2 Middle Eastern literature on news production and new technology

This section reviews some of the existing literature that deals with new technology in the Middle East and Kurdistan. Hamdani (2009) has undertaken a quantitative study that focuses on the common use of technological tools in Iraq’s print newspaper. The researcher selected the key obstacles that face the print newspaper and journalists’ practice in Iraq. Also, Hamdani (2009) provides an in-depth discussion surrounding the use of technology by journalists in their everyday lives and practice. The researcher argues that there is a lack of available technology tools and journalistic skills of journalists, and also not enough training courses for journalists in their organisations.

Mikhlaifi (2003) has focused on how new technology affects the management of new production processes in the media industry in Yemen. Mikhlaifi (2003) also argues that there is a significant lack of professional workers with the knowledge, experience and skills to use new technological tools in their

organisations. Yosif (2007) in his study has focused on the role of new technology in the field of print newspaper production in the Egypt. This research offers an explanation surrounding the development of new technologies in the field of media, providing an explanation and analysis related to journalists' situation. Yosif (2007) demonstrates the performance of journalists' practice and the level of interaction between workers within the organisation. Similarly, Mohammed (2010) acknowledges the importance of new technologies in the field of media production in the United Arab Emirates. The key aim of this study was to reveal the impact of new technology tools on journalists' practice in newspapers.

A recent study by Hamid (2013) details the impact of new technology on the administration aspects of Kurdish media organisations, including radio, the print industry and television. This research claims that the majority of journalists agreed that new technology has a big role to play in the field of media administration, particularly in improving their ability to manage news production.

In the above examples, five issues have come to prominence

1. The new skills needed by all roles in the digital newsroom.
2. The multi-skilling that many roles now combine or cross cutting.
3. The active role of technologies in the process of news production.
4. The role of the workplace community, role identity and key roles in making the newsroom work.
5. Knowledge and media management across a complex process.

The majority of the studies reported in this chapter have been descriptive of observed practices. This project seeks to combine similar observational work with the theory of development of work and organisational practice in the context of technology use. Two models that address all the five issues noted above are COP and ANT. These theories will be discussed in the chapters 3 and 4.

2.3. The impact of new technology on the newsroom

2.3.1 New technology and the newsroom

The current research project aims to explore the impact of new technology on news production and journalistic practice across automation and non-automation systems in the newsroom. In other words, the purpose of the project is to analyse the situation of the news production process and how new technology affects journalists' practice within the newsroom network. This research project applies the COP and ANT, providing the researcher with powerful tools to understand and analyse news practitioners' practice using a new technological tools in the newsroom network.

The key aspect of Eldridge's article (2014) focused on the historical media and technological emergence in the context of British history within the online media. Also, the article revealed the association of media-technology over the introduction of the steam press, including the telegraph and early broadcasts. Further, the researcher referred to the historical perspective that the British news media has adopted and changed through the delivery of new technology; this aspect has been linked to the revolution of the Internet (Eldridge, 2014). The findings show that Internet technologies have reached audiences dramatically and are increasingly treated as borderless products.

In Cottle and Ashton's (1999) discussion, one controversial matter is their focus on news technology tools. Using empirical study findings from a case study of the multi-media BBC, they claim these are 'in fact socially and culturally shaped and embedded within corporate and professional contexts and practices' (Cottle and Ashton's, 1999). News technology had a direct effect on journalists' practices, reducing costs and allowing work to be more efficient. Brautović (2009) also argues that new technology has changed the news production process and journalists' practice. Using an ethnography study, he suggests that the newsroom computer system has provided 'acceleration of news production processes' (Brautović, 2009). Through an analysis of ethnography interviews, Saltzis and Dickinson (2008) contend that within a British national media organisation, technology tools have played a big role in the reconfiguration of

the work environment and journalists' practice. In particular 'the research reported here has shown that traditional news organisations are undergoing significant changes in terms of strategic thinking and work organisation which ultimately affect the work and role of journalists.' Pavlik (2000) argues that the technology has affected the field of journalism practice, including the journalists' practice within their workplace, news content, quality of production and the structure of the newsroom environment. In this context, Avilés et al. (2004) claim that journalists' practice has been impacted by the new technological tools and that this shift has improved workers' skills, their activity within the workplace and their attitudes relating to the use of the new technology, in a positive manner. Moreover, most of the researchers readily agree that the technology has changed journalists' practice, pointing out that the new systems allow news producers to complete work faster and more efficiently, with fewer journalists.

Quinn (2002) remarks that the digital age has created a more efficient practice in the newsroom. He provides a comprehensive overview of the information relating to journalists' practice in the digital environment, specifically how journalists are able to manage the flow of information in the newsroom. Quinn (2002) argues that the use of new tools and information management allows journalists to conduct their everyday practices in efficient ways within their organisation. Keirtead (2005) argues that the new environment of journalism and the use of computers by journalists in the news broadcasting process has created a change in journalists' practice by delivering new tools, and these tools support journalists in their news production. Keirtead (2005) claims that these changes and implementations have become an essential aspect of news activity.

A survey of the variety of literature surrounding the uses, impacts, and interactions of new technological tools in newsroom production has shown that the new tools have a major influence on journalists' practice, shaping their behaviours, improving their skills and also increasing the amount of news broadcast in the workplace. Researchers agree conclusively that the new technology has changed the structure of the newsroom and journalistic practice.

2.3.2 The digitisation of the modern newsroom

This section will provide information on the digitisation of the modern newsroom. The development of technologies has led to a renewed interest in news workers in their workplace and in journalists' practice in the newsroom. There has been considerable development in many news agencies, including the appearance of many new tasks and jobs in the television industry. As a consequence, this has increased the amount of news production in the modern newsroom to 24 hours a day and to seven days a week. From this perspective, the new tools that accompany changes in the newsroom have created new and different opportunities for employees to work in a more interactive environment (McGraw, 2005).

Siapera (2012) describes the traits of the fast development of new technology as the backbone of journalistic change, which obliges journalists to comprehend these features in order to adopt and interact with the new work environment. Furthermore, the convergence between digitalisation and new technology in the workplace has led to more multi-skill, multi-task and multi-media jobs in the newsroom. This aspect has impacted on the processes of news production and journalists' practice: considerable improvements regarding news production have enhanced the quality of the news visually and the content in broadcasts. In this way, technology equipment in the newsroom provides staff with the ability to produce high quality audio and visual elements for news packages.

The role of journalists depends on their skills and creative ability to produce news items and to deal with technology tools. Journalists who use the new tools are able to organise and edit information to produce news packages as standard features of the modern newsroom (Grant et al., 2010). In this way, new technology use has impacted on the workflow of news and changed the shape of the news production operation. As an example, digital systems provide journalists with the ability to develop their skills and tasks through the use of special visual effects in their news packages on the screen. Such visual effects play a big role in providing more opportunities to journalists, including the ability to re-design, polish, add graphic designs and perform other creative tasks

in the news bulletin (Boyd, 2000). Pavlik (2001) highlights how the new tools of news production have played an essential role in the processes of newsgathering and news production, whether these are tools used to record events from memory or on videotape.

Today's newsroom practices have constantly been impacted by new technology and automation systems. This has subsequently generated a new model of journalistic practice within the newsroom and brought changes to the information management system. In this context, Murrell argues that:

‘..The technological change could not be held back. At the organisational level and at the level of the journalists' own understanding of their cultural role with the team, they accepted the change as long as it was well managed’.

(Murrell, 2014, p.15)

Due to this change, journalists' practices face many challenges that require having a full understanding of their tasks and regulation of their network in dealing with a range of heterogeneous actors (see Chapter Five). This includes news practice conduct in the newsroom and dealing with more interaction with equipment in the workplace. For instance, journalists increasingly deal with more interactive aspects of news items, including the graphics items, maps, audio and video editing, and also information editing. Hence, journalistic practices in the newsroom are continuously changing to ones using greater multi-media and requiring multi-skills and multi-tasking (Boyd, 2000).

The concept of multi-tasking in the framework of the contemporary newsroom is thus becoming a fundamental part of news practice in dealing with new technological tools. News managers are affected by this change as much as the workers who have to produce a news item as a coherent package. Furthermore, the new technology provides the news organisation's owner with many more efficient ways of carrying out procedures, reducing production costs and staff costs, managing production times and producing high quality news packages (Boyd, 2000). An example of this change is the ability to produce news items much faster than was previously done and the increase in journalists'

responsibilities and roles in the workplace. Avilés et al. (2002) demonstrate how journalists have adapted to deal with a new environment of news practice, particularly with regard to financial constraints, through reductions in the number of crew and work pressures that mean more responsibility for them.

‘ The tools, technologies, platforms we use today for engagement will inevitably change and so will our need to change with them and adapt again’.

(Batsell, 2015, p.9)

Accordingly, journalists have had to adapt to the new rules of technology implementation in the newsroom network and adapt to the new environment of news practice.

The past decade has seen the rapid development of news technology in many news television industries. The process of change has affected the form of television news, for instance, the approach to newsgathering, news presenting on screen and news production (Avilés et al., 2002). This change in the news industries has had an effect on the tendencies of journalists to use this tool to produce new ways of dealing with news packages.

Keirstead argues that technology is an intrinsic part of the news production process:

‘...it’s hard to picture a television newsroom without a computer system. A computer system efficiency. Producers and editors can retrieve stories from writer and reporters and edit them without having to rely on messy pencil additions, or a confrontation with a writer who has been asked to rewrite a piece from scratch’.

(Keirstead, 2004, p.22)

Avilés and León (2002) show how the application of a digital system in the newsroom supports the practitioners (journalists, broadcasters and engineers) in increasing their collaborative work in the workplace; thus it allows the journalists to work together with other staff members in the process of

producing news. The next section will discuss a newsroom automation system in more detail.

2.3.3 Newsroom computerisation and automation

This section will discuss the computerisation of the newsroom and how this aspect has become more important in recent years. Keirstead (2004) states that the new computer system is 'the backbone of the newsroom'. The automation of the workplace provides the news practice with many facilities to create and shape the news broadcast. In particular, it:

'... allows users to monitor incoming agency copy, write stories, work on a rundown, access the Internet, and access audio or video clips and their network's archives from their desktop'.

(Meadows, 2007, p.16)

Through this system, journalists are able to manage their work relationships and news projects by themselves. Also, automation helps in dealing with other members of the working community, in being able to easily contact other practitioners and news producers. Yorke (2000) points out that computer technology plays a big role in the majority of processes in a news channel, such as organising and producing scripts.

The automation system in the newsroom is also useful for managing the processes of editing information, sound and vision. It provides greater flexibility to news editors in editing information, footage and audio recordings. This helps the journalists and provides them with an understanding of editing practice and how editors deal with their news stories. Also, the system provides journalists with the ability to monitor their news projects on the rundown list until the final stages of the news broadcast.

The automation system is a fundamentally new approach to creating a more interactive news production network. It provides the news organisation with the ability to manage links different workspaces in the newsroom network placing them in regular contact. This includes the newsroom space; ingest room, studio, anchor desks and other areas around the workplace (Utterback, 2007).

Also, the outside news crews are able to conduct their news practice on the move, for instance, writing news stories, looking at footage, managing their timetables, going through the running order, making an electronic copy of the scriptwriting, coordinating with the broadcast staff and organising relationships between each other (Rhomborg, 2012). Moreover, 'the automation system is use like a controller to the runs production devices during a news broadcast' (Keirstead, 2004, p.22). In this respect, the system allows the news manager to control all operations of news production and the postproduction stage. This is especially important with regard to the news library and storage of incoming news, as well as the output and final archiving of the material in the system.

Avilés et al. (2004) refer to the relationship between technology use and workplace reconfiguration, and discuss the huge modifications that occur as a consequence in relation to journalists' skills. Journalists are spending more time inside the newsroom and devote themselves to dealing with new technologies and working in front of computers to assist in editing information and footage together (Siapera et al., 2012). The development of new computer-assisted systems in the modern newsroom has put journalists at the forefront of many changes and created new job positions for them. Furthermore, new systems have led to the introduction of many new tasks with regard to journalists' practices, such as researching videos, information and data editing, and monitoring and managing the rundown list.

The news automation system brought many benefits to journalists, such as the speedy recapture of information from a central store especially archived input and output from the newsroom. Another key advantage this technology has brought is the increasing ability to deliver the information consistently to other journalists in the newsroom. Journalists are receiving the same information at the same time and in a similar form. In this way, journalists are able to deal with a heterogeneous network efficiently (see Chapter Five for more details), for example, video recording servers and nonlinear systems of editing, the management of graphics systems and databases systems and the usage of multiple workstations with particular software (Jones, 2005). Besides this, other work sections have connections with each other, which means that all

members of the community have access to the same knowledge and are able to update their information immediately (McLeish, 2005). This has a big impact on the speed and turnaround of the news stories generated. Through the automation system, journalists are automatically aware of the location of the newsstand in the rundown list, which also illustrates the total time of the news program (White, 2005). At the same time, journalists are able to reach an electronic copy of the news list and exchange the news rank on the playlist.

As a result of the change to automation newsroom management, journalists have the ability to perform their practices more efficiently in the workplace, especially by transporting a large amount of signal items between different areas in stations by use of the interconnection system (Jones, 2005). The computerisation of the newsroom has also rapidly increased the capability of workers to control all news operations at one time.

One of the most common automation systems and digital news production tools in the newsroom is Avid iNEWS, produced by Avid Technology. The automated Avid system is based on workstations that are called 'news cutters' instead of digital edit bays. These cutters are connected within the newsroom via a network server. This allows the journalists and newsroom members to access all news material within the network (Pavlik, 2001). Through this tool, journalists in the newsroom network have multiple opportunities to manage and monitor the process of news production in the newsroom network. The Avid iNEWS system is an influential tool in the modern newsroom, providing journalists with a dynamic device to control the form and content of news packages. In particular, the software offers a lot of flexibility for the user, including the delivery of breaking news, storage of news material, broadcast solutions and connections between the members of the network. Also, the system allows journalists to conduct news practices to create, browse and catalogue multimedia assets within the newsroom network (Vigneaux, 1998).

2.3.4. Knowledge management in the newsroom

This section will discuss knowledge management in the newsroom and how the automation system provides journalists with key tools for knowledge management.

The concept of knowledge management in a news organisation indicates the process of knowledge generation and codification. The transfer and sharing of this knowledge are described as explicit and tacit forms. These two types of knowledge description are helpful for conducting successful creative processes of production in the news network (Bielawski and Metcalf, 2003).

The journalists' everyday routine is one of dealing with large amounts of information and knowledge. As such, it requires methods to manage their operations and create forms for their production. This creates new assignments for the journalists to manage their knowledge and information in the newsroom, in particular, the development of journalists' skills in dealing with more interactive technological tools in their practice. This in turn requires learning and in-depth experience in managing tools and shaping information with them. This aspect is an essential part of the process of news production and news management in the contemporary newsroom space. Knowledge management is concentrated on dealing with all aspects of knowledge and information within the news organisation. This includes the creation of knowledge, and sharing and providing support for the journalists to learn and then innovate, specifically when dealing with new technology in their production output (Awad and Ghaziri, 2007).

Quinn (2005) argues that technology is a powerful tool for providing opportunities to the journalist to conduct their practice

‘... it provides options for people who make decisions it is a tool to be used to do better journalism. But technology is powerful driver’.

(Quinn, 2005, p.12)

This encourages journalists to change their roles and practices in order to manage information and knowledge more effectively. In particular, it provides many opportunities for journalists to learn, practise, communicate, obtain feedback, share understanding and information between network members and change the shape of their production output. This means that newsroom practice has required journalists' to develop skills, such as involving them in training and workshops and making them more knowledgeable in dealing with new technology management large amounts of information.

In this context, the news organisation should focus on creating the best circumstances for encouraging journalists to share their knowledge, participate in activities and cooperate with members of the community. In this way, Quinn (2005) argues that the new digital age of newsroom practice requires new approaches in terms of both the management of human and nonhuman actors in the newsroom. Moreover, the news organisation must establish a suitable policy and communication standards for knowledge and information management (Tapan, 2011). For instance, Avid technology tools encourage journalists to share their information and knowledge in the same workplace or virtual community. Davenport and Prusak (2000) believe that new technology and network systems create a great infrastructure for sharing and exchanging knowledge among journalists, which consequently creates excellent opportunities for knowledge management.

2.3.5 News editing operations in the newsroom

This section will examine the news editing operation in the newsroom. The recent developments in newsroom practice have led to a dramatic change in the operation of editing and have redefined the standard of the editing process in the newsroom. The new automation system of the newsroom provides new tasks in the workplace for journalists, such as the ability to edit information and footage at the same time. Through this system, news editors are able to work easily and communicate with other parts of the newsroom area; by sharing information, knowledge and feedback about their work. Also, the management information system provides the news crew with flexibility in order to manage

and control their news projects. The new tools of editing provide practitioners with new techniques and approaches for dealing with news items, specifically the non-linear system of editing footage and audio to produce news packages. As a result of such technological advances, the linear editing system is gradually being rolled out in the contemporary newsroom.

The change that has occurred in the field of footage editing does not mean that the television news industry is completely unable to use tape editing. The system still has a place and some limited space in the news broadcast industry and digital newsroom (Andrews, 2008). This offers journalists the chance to use a linear editing system to edit both forms of video feeds and videotape. The journalists, however, are not able to control their practice entirely without problems. For instance, the machines need considerable maintenance, which can result in damage to the tape (Hartwig, 2005).

With the new technology tools in the contemporary newsroom, multi-skilled journalists are able to manage their production and produce news packages independently. This means that journalists are individually involved in the process of news making; for example, journalists must deal with the shot types and choice of information, then put them in a logical sequence as a package. However, Boyd (2001) points out that shot editing is just half of the production process. Tozer (2004) refers to the changes that happen in the field of footage editing and information editing and then the role of journalists in creating their news story, prior to digital editing:

‘The journalist would be able to write and edit only his script at his desktop and then move to the editing suite, with script in hand, to begin the edit in an editing suite, with a craft editor’.

(Tozer, 2004, p.667)

The journalist should have knowledge and experience of how they manage the script list of shots with the appropriate information in order to create the news story. Additionally, editing is a process that is not just about organising the sections of footage to follow each other, but it involves a creative and logical approach to organising the sequence and to balancing information, voice-overs,

info-graphics and footage. Moreover, the editing information process is an extension of the operation of selecting shots, which requires more skill.

The news editor's job in the digital age is not only limited to the selection of shots. Multitasking and multimedia also require the organisation of the visuals and voice-overs of the news items. The newsroom automation systems are effective in dealing with both the information and shots without any problems being created. There are two common ways of editing information and footage. Some editors prefer to write words to pictures and others prefer to organise and match the footage with the text or information (Boyd, 2001). Austerberry (2004) states that:

‘The newsroom system is used to put together all the stories into a running order for the final broadcast. This is sent as a playlist or rundown to the automation system in the play out studio’.

(Austerberry, 2004, p.5)

In particular, the journalists are able to select shots, choose information, organise and exchange pictures, and order the stories in a logical sequence. These abilities create more opportunities for the journalists to learn effective techniques for dealing with the news packages, particularly regarding the processes of editing and creating. The news editors arrange the shots in a sequence according to the news information and scriptwriting. This procedure is a very creative process that requires experience of dealing with shots. At the end of the editing, the editors obtain all records of the shots as a package and form them into a coherent story that matches the news information and script (Cartwright, 1999). The flexibility of the new system makes the editors more like controllers of the news packages.

Finally, it is a basic requirement of the editors in the newsroom to know more about the concept of news production and the visual grammar aspects of production in order to conduct their tasks in an efficient way (Bowen and Thompson, 2009). The key responsibilities of the news editors in this process are how to deal with the digital equipment and how to manage the workstation desk.

2.4 Key news crew in the digital newsroom

This table describes the key role of the workers and the work area in the newsroom network.

Table 2.1: Key roles of human actors in the newsroom

Title	Key Role	Workplace
News producer	The news producer is the second in command in the process of news production. Also, news producers have the key roles in the process of news creation, decision-making and providing the news crew with instructions in order to involve them in the operation of news production.	Newsroom and control room
News editor	The news editor ensures the key assignments create a news package and also, conducts and writes the news story, gathers information and deals with the visual aspect of the news story.	Newsroom
News reporter	The key task of the news reporter is focusing on gathering information in the field to make news reports, in-house reporting, and involvement in the live broadcast and news stories.	Newsroom and fieldwork
News director	The main task of the news director is newsroom control, especially to manage the process of news production and provide news crews with personnel, including news	News control room

	anchors, camera operators, sound engineers, GC people and technical staff.	
News anchor	The function of news anchor focus on the present the news stories during news programmes, live broadcast and also manage the studio host interviews.	Studio news + newsroom
News graphic artist	The news graphics artist in the newsroom provide the news crew graphics and visual aspect for the news producer, editor, program maker,	Newsroom and news control room

2.4.1 The news producer in the newsroom

This section will provide information on the news producer/journalist in the digital age as a human actor in the news production network. In the digital age, the news producer plays the most essential role in the structure of newsroom practice; in particular, the automated system requires multi-skilled journalists, multi-media content and multi-tasks in conducting news practice. Some writers (e.g. Kindem and Musburger, 2009) have referred to the producer as a 'risk taker' in the workplace, specifically in dealing with news production and the use of new technological tools. In this manner, Barnas argued that:

'...The news producer also plays an important role in deciding how to use the video and sound bites that are available to them and their reporters and how to best work them into the newscast to maintain a maximum of interest'.

(Barnas, 2010, p.226)

In the case of the digital newsroom, the news producer's primary task involves monitoring the operations of news production and broadcasting. In this way, the news producer is involved in the process of editing and writing news in the

newsroom, particularly providing the news practitioner with instructions surrounding news practice, and re-packaging and re-working the news item. In this context, the position of the journalist/news producer in the digital newsroom is an example of one of the focal actors in the network (see Chapter Five). The news producer is able to establish a programme of action in the network and obligate the other members to follow the necessary key goals.

The news producer's job can be described as an arranger of many different human and nonhuman actors that are involved in the news-making process; in particular, to ready them for a line-up or rundown of stories (Silcock et al., 2009). Thus the news producer/journalist can also be seen as a teamwork leader in the newsroom (see Chapter 3). The news producer behaves in a similar manner to the 'captain of a ship'. They attempt to create stabilisation in the network in order to manage the news crews and the news operation. For example, if technical problems occur within the news team, the news producer must try to control them and provide them with instructions to find a solution. In this way, news producers are able to avoid the 'ship sinking'. The news producer has a central position to play in managing the strategies involved in news action as well as determining the structure of teamwork and the network goals, and selecting the content of news program in the newsroom.

The producer's tasks are concentrated on the more internal aspects of the workplace, including the human and nonhuman actors. The news producer is the creative manager, who has a big impact on the operation of news production and constructs the direction of the news practice. Through these roles, producers seek to support the other community members in order to get them to work more efficiently and inventively in dealing with the news as a package. Also, there are many tasks in the news production network that are directed by the news producer before airtime. These tasks begin at the start of the day's work and continue until the end of the day. They include being responsible for the rundown list, checking the content of stories prior to broadcast, building a policy for decisions about news events, and creating news stories, information management and content play out of the newscast.

In the automation system, the scope of news practice has changed significantly. In particular, the news producer has to acquire a talent for dealing with a large amount of information at one time, as well as experience in doing so. These aspects of the news producer's skills are more focused on information gathering, preparation of the news package and dealing with many different news sources. Thus, specific skills and abilities are required for managing the processes of news production (Utterback, 2007).

The news producer has strong relationships with other members of the newsroom community, particularly those located on the upper level of the hierarchy. This means that the producer has a wide range of relations with other human and nonhuman actors in order to create collaboration in their news practices. Also, the producer, as an example of the focal actors in the network, attempts to construct stability in the network and arrange a connection between the actors in the news crew. The producer therefore pays a lot of attention to the news operation and production.

The successful operation of news production is based on many factors in the network. For example, the human actor element includes the abilities, skills, knowledge and personal experience of news practice. These elements play a big role in the processes of translation and stabilisation of the network. Regarding the position of the news producer as an example of a focal actor, he/she is able to determine the form of the network and production, such as the news program time and how much time is devoted to the news and news stories, as well as guests of news programmes (Barnas and White, 2013).

The news producer has the role of creating a work policy and a news agenda and determining the goals for everyday practice. Also, they may have to frequently attempt to convince other members to follow the key goals of the newsroom (Kindem and Musburger, 2009). The news producers in the newsroom network are responsible for completing the daily editorial content of the rundown list. The decisions of the news producer relate to the components of each news program in the 24-hour news cycle and breaking news (Chapman and Kinsey, 2008).

The news producer's everyday routine involves many actions and activities inside the newsroom. These include searching for new ideas, topics, and news making programmes. Also, news producer/journalists are involved in determining tasks for human actors, as well as attempting to remove any unappealing ideas from the daily agenda list and looking for better alternatives. Then they are able to choose the workable ideas in order to create a better news story. They understand the policy of working inside news channels and which diverse topics need to be included in the news material (Kindem and Musburger, 2009). The involvement of human actors in the activities means that the producer is required to inform them of updates and changes surrounding the situation. The news producer has a direct relationship with the news director as well as a close relationship with the production team.

The majority of news producers are responsible for the newsroom programme policy-making and news practice. The responsibility of the news producer includes devising editorial content and news displays, abiding by the ethical aspect of news practice and monitoring the news operation. In this way, this work location requires many creative skills from the news producer, which are necessary to complete their task as an example of focal actor. For instance, the requirement includes a personal ability to use an appropriate computer system for the newsroom (Keirstead, 2004). In addition, the news producer must manage the surrounding human resources, including both the human actors and non-human resources in the heterogeneous network.

2.4.2 The news director in the newsroom

This section will discuss the role of the news director in the newsroom network. The news director plays an important role in the process of news production and the newsroom network. Hilt (2013) argues that in the majority of newsroom workplaces, the news director is responsible for the executive tasks of the news crew, including the launch of news program, the news practice, operating the equipment of news production, budgeting and creating a framework for the workplace policy (Hilt, 2013).

The person who manages and monitors the control room (CR) is called the news director or floor director or manager (Utterback, 2007). Their task as ingest director is to monitor all aspects of the news production process and news broadcasts within the Control Room (CR). Also, the news director is responsible for creating the coordination between the news control room members and other journalists in the news team. Frequently, the news director makes decisions regarding the news material and stories in the final rundown list of broadcasting. This task is conducted without dealing with the content of the news. The task of the news director is to focus on the management of the news crew in the ingest room and implementation of the rundown list. In this framework, if any problems arise during the process, the news crew will be directed first to the news producer and then to the news director for them to solve it (Schultz, 2004).

In some news channels, the news director sits closely to the switcher person or the vision mixer user in the control room, providing instructions to the switcher operator and the talkback in order to manage the news operation. Also, the news director or supervisor has multi-tasks and multi-media tools in order to deal with vision mixing and to provide instructions to operate the equipment and manage the multiple screens. The news director has the authority to deal with the live screen, record screen, air-player, Character Generator (CG) player and editor of sound. Also, the director provides advice for the news presenter regarding the camera operation in the studio (Kindem and Musburger, 2004). In this way, the news director plays an essential role in the process of news management with regard to the equipment used for news operations. Cury states that:

‘...The control room facilities include an audio board and a public-address (PA) talk-back system linked to the studio floor, cameras, and sometimes remote sites, such as the makeup rooms, props, and so on. Audio recording and playback devices ... may also be present’.

(Cury, 2010, p.25).

The situation of the control room workplace is an essential aspect for bringing stabilisation to the news production network in the station, such as the statement or instructions of the news director to the vision mixer operator as a means of choosing the shots. In this manner, the vision mixer person attempts to catch the camera shot that has been chosen by the news director, especially for a live news programme or special event.

2.4.3 The vision mixer

The vision mixer operator carefully listens to the news director to manage their tasks and shots on the screen. The vision mixer, in order to control their tasks, needs to be able to use both hands to control the bottom of the vision mixer and the fader bars. The vision mixer attempts to catch the preview monitor and send it to the transmission monitor or on-air monitor. The operator deals with a multi-screen in front of them. Also, the job requires further skills to manage the vision mixer desk: both technological tools and experience are needed to choose the right shots on the screen. In this way, the key skill that is required from the operator is the ability to manage a multi-screen mixer in order to be able to control live events and have the speed to be able to choose the appropriate shot that is perfect for transmission. If they miss good shots, there is no second chance to choose another shot. This makes it very difficult in a practical situation for the vision mixer operator to choose a shot using quick thinking. In this context, the operator is a creative actor in the process of news production, especially because of the responsibility to choose and use appropriate new tools to produce a news package and manage the visual aspects of the screen.

2.4.4 The news editor in the newsroom

This section will examine the role of the news editor in the newsroom and the interaction of the news editor with the automation system. The news editor or news writer has a big role to play in managing and creating the news package. The implementation of the newsroom automation system has led to a dramatic change in the position and roles of the news editor, in particular when they are dealing with the processes of information editing and footage. This change has

noticeably impacted the position of the news editor, who now has more responsibility in making decision around the news stories and content and the news treatment. Also, the news editor's function is to participate in the decision-making processes within the newsroom network, for example, the duration of a news item, shaping the news story and how to cover news events, specifically working as an individual gatekeeper in dealing with news items. There are many activities that are driven by news editors, for instance, the 'newsroom conference' or 'morning meeting' in which they must engage with news crew about individual news stories. During this engagement, there is discussion between the members on the rundown list and the day's story output. The meeting in the newsroom is the first step for the news editor towards deciding on the stories that should be included in the day's agenda and the day outline plan (Chantler and Stewart, 2009). Technological tools provide the news editor with new ways to conduct news practice more efficiently. These aspects of news practice make the modern newsroom more challenging for news editors in conducting their everyday working life.

The technological tools, therefore, provide a new strategy of work practice for the news editor and also create more interaction in which to conduct their multi-tasks and multi-skills practice within the newsroom network. In particular, the change has affected the news editor's everyday life and news workflow, specifically in dealing with information and footage to construct the news package. Also, the new automation system supports the news editor crew in generating new, shared methods of news practice within the framework of news production. Shrivastava (2005) describes the Avid automation system as follows:

'...Avid INEWS Multi byte is newsroom automation system for Asian- language broadcasters. This toolbox of separate but highly compatible applications includes Running-order editor, Directory Viewer, Script Editor, assignment forms, instant messaging and much more'.

(Shrivastava, 2005, pp.105-106)

Another characteristic of the automation system is that it increases the journalists' capacity for knowledge management (see the previous section) and also the current rise of news productivity. In this context, there are many journalists who emphasise that the new system tools are the primary factor for conducting the newsroom change and improving the skills of the journalists within the workplace (Siapera and Veglis, 2012). News editors require a high level of education and experience in order to manage their everyday tasks. In particular, the journalists are able to use a building block approach with the help of the system, such as adding applications and improving the quality of work; or the users are able to replace items independently and also have the ability to use other computers to edit the news items from any standard workstation within the newsroom network (Shrivastava, 2005).

Mooney and Simpson (2003) show how the editorial method of news practice has increasingly been changed by computer systems and electronic technology implementation in the newsroom. It has specifically impacted the processes of newsgathering in television stations. To give an example, the automation system in the contemporary newsroom has changed editorial tasks in recent years. The system puts the elements of a news package together in a running order ready for final broadcasting. This is sent as a play list to the studio control room (Austerberry, 2004). Journalists therefore are able to decide the frequency and the times of the news schedules, as well as the duration of the newsletter. Furthermore, the system gives journalists confidence about their ability to control the news agenda, the daily plans, news policy, the double review of news stories and the double-checking of all rundown lists. The news system therefore supports many responsibilities for the news editors, for instance dealing with the details of news content and the news output (Chantler and Stewart, 2009). Also, the new tools provide another job context for the news editor: editing the information and footage of the news stories at the same desk station.

2.4.5 The news reporter in the newsroom

This section will examine the position of the news reporter within the modern newsroom. The development of new technology has changed the processes of newsgathering and has, as a result, impacted on the framework of news reporters' practice. Fleming et al. argue that 'the skills of a broadcast journalist have changed in line with the introduction of new technology in the industry' (Fleming et al., 2005, p.115), particularly in relation to the responsibility of journalists for news item production. Usually, the news reporters in the newsroom conduct their 'work with a camera crew, a satellite or microwave links unit or a television studio linked in some way with home base' (Yorke, 2000, p.96). Hence, the news reporters require multi-skills, multi-tasking and multi-media in the field.

The news reporter plays a significant role in dealing with the computer automation system in the newsroom, specifically in order to pass news stories to the news crew in the workplace, and to construct, edit and shape the news items (Greer, 1998). In the digital age, news reporters are achieving a high level of re-professionalisation in their news practice with redefined new tasks available to them. As Quinn (2002) notes, the new digital kits that are available in the newsroom are increasing the requirements for journalists to develop understanding and practices in order to manage information and shape their behaviour. Quinn (2001) demonstrates that the new technological tools make the news practice for the correspondent easier than before, allowing them to take advantage of more opportunities to cover events in their best form. Also, as already explained, technology tools have changed several aspects of everyday practice and made it an increasingly attractive choice for the practitioners. In the past, the journalist needed a high level of writing skills in order to produce daily news programs; nowadays, in contrast, new automation systems oblige journalists to have a higher level of skills in the use of technology and other visual aspects of news stories. In this context, Clausen (2003) argues that:

'...Visuals serve as an important source of documentation in broadcast news. Visual are paramount, and they are carriers of

any news story whether merely illustrating a government meeting, official event, or interviews that support the narration of an event’.

(Clausen, 2003, pp.94-95)

Therefore, news reporters face challenges with the delivery of new technological tools to the newsroom, such as, in particular, how they manage their news tasks and their interaction with the digital environment. Thus, the change to the automation system makes the news practice much quicker and more efficient, particularly when monitoring the footage and writing aspects of news stories within their newsroom network.

Finally, the skills and abilities of the practitioner are increasingly becoming the primary elements of news reporting in the digital newsroom (Evensen, 2008). The functions of the news reporter, who is responsible for the procedure of news producing, include research, gathering information, choosing shots, creating sound-bites, shaping stories and writing the content of the news items. Sometimes the reporter appears in the live broadcast to provide the audience with information, comments and analysis around the news events (Kindem and Musburger, 2005).

The new circumstances involve constructing a news basis to conduct news practice. This requires supporting the journalists in becoming more multi-skilled and multi task-oriented in the workplace. Journalists the reporter need obtain experience on how to gather information in an appropriate way through the use of new technology (Quinn and Lamble, 2007).

The news reporter participates every day in the newsroom conference in order to gain information about the news plans and news agendas. Through this daily meeting, the news staff set the daily plans to set up the first format of their production. These aspects of news action include selecting the network aims and decision-making regarding how they organise their news teams to cover which news events and how and why (Evensen, 2008). The task of the news reporter focuses on several news formats of produce. This includes three types of news coverage. The package formats refers to the news reports that are

prepared by a news reporter in the newsroom or outside of the stations. Another task is completing the Sound Off Tape (SOT) and the Voice-Over (VO) format (Raiteri, 2006). To do this, the news reporter conducts a wide range of tasks and relationships with human and nonhuman actors in the framework of the newsroom network. In particular, in the modern newsroom journalists take their task as a package and will present it to the news producer or deputy of news producer to check and decide whether or not to broadcast.

2.4.6 The news anchor in the newsroom

This section provides discussion of the news anchor and the role of the news presenter within the context of the newsroom network. The news anchor is one of the most important human actors in the process of news production. Nicholas and Price (1998) describe the role of the news anchor as combining live events with the news reporter, providing a dynamic panel discussion and managing feeds from the automation system.

‘...There is a hierarchy of information-providers, with the anchorperson who sits in a studio behind an impressive desk in charge. The impression given is that he or she controls the stories, allowing reporters and correspondents to contribute’.

(Nicholas and Price, 1998, p.99)

Also, the role of the news anchor is ‘to present the news as “objective truth”, to make it seem neutral, common sense and obvious’ (Abel, 1997, p.13). The news anchors have a link with both the human and nonhuman actors within the newsroom network; Keirstead (2004) argues that ‘there are human relations aspects to the news producer and news anchor team that are essential to the success of the program’ (Keirstead, 2004, p.83). For instance, the relationships between the news crew in the newsroom network, such as the news director, news reporter and camera operator, all lead to the stabilisation of the network and effective management of the news production. The situation is the same for the nonhuman aspects of the network: they have to be managed as part of the news production process, for example, the autocue or (teleprompter)

technology tools, the earpiece, the microphone and satellite newsgathering. Hence, both aspects complete the operation of news production by constructing links and interactions during the essential activities in the newsroom network.

The introduction of automation systems in the newsroom allows the news anchor to conduct their news practice in a more efficient manner, particularly in setting and managing their relationships with actors in the news production network. Thus, the position of the news anchor has changed over time, especially as a result of technological tools used in their domain. In this way, the news anchor can effectively deal with more than one genre of news item, for instance, news stories, phone interviews, live events with correspondents and studio guests (1+1). Eadie (2009) highlights that:

‘..In broadcast news, journalists and technology are inextricably linked. As technology improves, journalists have more tools to help them tell the story. But sometimes, the tools drive the storytelling’.

(Eadie, 2009, p.639)

Another practical aspect of the news anchor’s job is engagement in the news programme and managing the news guests in the studio room. The anchor news must also have the ability to manage the coverage of live events outside of the studio in the fieldwork, which is transferred by satellite newsgathering technology (SNG) to the studio (Hill, 2007). This type of programme requires the news anchor to have many skills and much knowledge, not only interviewing techniques but also the ability to work under stress and manage the technology tools in order to polish the final shape of the news item successfully.

The technology becomes an essential part of the everyday life of the news anchor in the workplace. It includes the use of the autocue to ensure a smooth delivery and completing the operation of the news presentation successfully (Stephenson et al., 2009). Through this, the news anchor is able to display the news script sequentially and manage their news scripts in good form. The key knowledge and experience of the news anchor is how use the autocue machine.

The news anchor also follows instructions and direction from the news directors or news producers inside the control room. In doing this, a wide range of connections are created between the news crew using the automation system or direct contact in the field of production, in particular by an earpiece or headset mics to connect the camera operators and the news anchors during the broadcasting time (Newby, 1997).

Therefore, in the digital age, the operation of news presentation has changed dramatically with regard to the digital space in the studio and control room. Also, the main job of the television news presenter is to monitor the situation in the studio and to put the news package together (Stephenson et al., 2009). As we mentioned above, a new working environment has led to a change in the position of the news anchor's job. This involves managing different news programme forms, dealing with different persons and thinking about each genre of news material in a different style (Newby, 1997).

In the modern newsroom, the job of the news anchor is not limited to specific tasks; they also play a big role in shaping the news items in the newsroom more generally by discussing the news program with news editors, news producers and news directors. Also, as part of their job, the news anchor is a participant in the editorial process of the news item. This interaction of the news anchor creates a good atmosphere and gives them full understanding around the process of news production. A key task of the news anchor is the process of news reading, which is an essential part of the presentation of the news operation and provides the news anchor with exposure to the audience (White, 2005). Technology tools make this task of the anchor easier and more flexible, as they can provide comments, allow re-edits and put marks or comments on the news text.

2.4.7 The news graphic artist

The section will examine the news graphic artist in the newsroom practice workflow. The use of information graphics is an essential aspect of news practice in the contemporary newsroom. George-Palilonis (2013) mentions that '...today, the organisational hierarchy of most newsrooms includes a "graphic"

or “art” department that is home to any number of graphics reporters’ (George-Palilonis, 2013, p.7). In the television newsroom, this department is close to the news crew (the news producer, news editors, news reporters and news director), providing them with the ability to shape their news stories and news packages. For instance, in order to produce graphic information in the newsroom, ideas are required from the news editor and graphics artists to conduct their discussion surrounding their project in order to create a visual aspect to their news item.

The visualisation aspect of news items combines information and visual elements in order to create the news item. It enables journalists to provide more details, information, data analysis and knowledge to the audience. This aspect of the news story is shaped in many different forms in order to illustrate the content of the news item, including the charts, graphs line, tables, maps, composites and re-created events as video (Friend and Challenger, 2013). News graphics are a particular visual technique that is commonly used in television to provide the audience with a more detailed explanation and information about events. Through this tool, news editors are able to provide more illustrations to the viewers, for example, graphics of car, plane or train crashes (Rich, 2009). Through the process of creation, the graphic designer combines many elements and actors in order to shape the visual aspect of the story.

The use of information graphics has been changed by the development of technology in the television newsroom. There are two main forms of information graphics in the modern newsroom. These are ‘over the shoulder’ (OTS) of the news presenter and ‘full screen’ in the news report. These forms provide the journalists with the ability to deal with the news items in a more flexible way. For instance, it is one way to find a solution for the lack of footage for a news item and creating news reports with footage. In particular, the graphics designer is able to use the information graphic as either a fixed or moving image in the news item (Mcadams, 2005). The graphic designer and news editor are attempting to describe and interpret complex information and data with the simplest graphic forms. This simplifies the news story and makes it easier to understand for the audience.

Therefore, in the modern newsroom, information graphics have many purposes for example, in general news items, economics news, daily graphics, and weather graphics (Pettersson, 1993). Their use will depend specifically on the requirement of the news event feature and how best to treat the information in the context of news graphics. These factors make information graphics fundamental tools in the field of news production, especially, in creating more interactive information messages that are interesting and accessible for viewers (Smiciklas, 2012).

In order to generate interactive and creative news graphics, the designers use a variety of techniques and animations. Technically, the procedure of information graphic production requires a wide range of skills and knowledge, covering a variety of software and editing techniques in order to create the item successfully. The majority of graphics artists prefer to use Apple computers in their work. There are many information graphic specialist actors who recognise that the development of technology in this field has affected the area noticeably. Also, this change has demanded that specialists re-tool and re-build new perspectives surrounding their production. They have also had to learn to use the technological equipment that is necessary for the news graphics producer (Johnson-Cartee, 2005). Thus, the use of new technological tools provides the animator with the ability to create and interpret the news information in a better visual form, but the change in designer work has led to the need for more skills to understand the visual grammar and syntax of the information graphics. The information graphics artist is able to produce visual items and verbal content at all stages of the construction of the news operation (Johnson-Cartee, 2005). Hence, the new technology facilitates this job of conducting the practice more effectively, creating a new phase of multi-media and multi-skilled operations for the graphic person.

2.5 The studio and control room in the digital age

This section will provide information about the workplace, including the control and studios.

2.5.1 The studio control room (SCR)

This section provides information on the studio control room workplace in the television environment. The various workplaces are connected together in complex and various structures. In such a workspace, the journalists and workers are able to conduct their news practice, such as in the control room. The studio control room (SCR) is located in a separate area, close to the news studio (Zettl, 2009). This room:

‘...houses a master switcher and video equipment associated with each studio is available on separate racks in the MRC, such as equipment sync pulse, generators, special effects generator, test equipment, video and audio monitors’.

(Sharma, 2003, p.445)

In this area the ‘automation systems control the playback of content, insert, interstitials, and commercials’ (Cianci, 2009, p.180). Also, it is important to indicate that the change that has occurred in the newsroom area has impacted on other workplaces, including the SCR and the news studio (NS).

Through the workplace, the journalists are able to control the news production process via links with the news studio. In particular, the footage signal is transmitted from the camera inside the studio to the SCR and then there is a signal transmission to feed the master control room (MCR) (Brice, 2002). Jones et al. (2013) describe the automation system by stating that:

‘...News automation oversees these islands of digital production technology and brings their control and play out under one use interface (UI) that requires as few operators as possible. News automation is a loose term with little resemblance to its sister automation system in the master control room. It is described as loose because, unlike program play out automation, which follows a fixed playlist, news production is live and unpredictable and better described by the term live assisted news production’.

(Jones et al., 2013, p.1233)

Therefore, this change of new technology equipment provides the news practice with great tools to be more controlled, more manageable and more skilful in their use of them. These elements have impacted the reconfiguration and rearrangement of the structure of SCR as one of the most complex workspaces in the television station. The new structures of news practice and news production system have redefined many new tasks, skills and workplace situations for the journalists. Also, during the change that has happened, the workspace has come to be divided into the following sections: the newsroom (NR), studio control room (SMR) and studio room (SR) or anchor desk. The automation system has linked these together to manage the news production in the contemporary newsroom.

There are many employees who collaborate in the production control room and are involved in the news production process. The news director is the person who has the most authority to control the framework of the news and the news production crew in the SCR. The news director has the responsibility of ensuring the output can be delivered to the audience and of knowing how they get the news message in a smooth form. In particular, the news director in this position deals with the technical aspects of news production (Boyd, 2001). Also, the news directors have significant decisions to make surrounding the news footage, voice-overs, shoots and audio sources, which are being broadcast on an on-air screen. Sometimes in particular situations, the news directors have difficult tasks and work, especially with live event broadcasting and dealing with multiple camera sources that are fed to the control room (Kindem and Musburger, 2005). This task requires more skills for creating efficiencies between the SCR members. The news production team are positioned in the SCR overlooking the anchor desk; the team includes the director, air player, switcher, executive producer, technical staff supervisor, lighting supervisor, audio engineering operator and character generator (CG) (Millerson, 1993). The members of this crew are directly involved in the news production process, and they have influence on the final form of the news item.

This workplace comprises the necessary equipment and interactive technology for producing the video, audio and graphics of the news package (Cury, 2010),

in particular, the sound mixer (audio board), vision mixer, videotape record (VTR) and teleprompting computer techniques (Utterback, 2007), the lighting mixer, the monitor wall and the camera control units (CCU). All this equipment is connected within the automation system, such as Avid technology. Through this technological equipment, the newsroom journalists are able to control all the audio and video output of the news production.

2.5.2 The news studio space

This section provides information on the studio area in the television station. The studio space is attached to the control room, with or without windows to monitor the anchor desk and is also connected with other workplaces by the automation system network (Utterback, 2013). Through this association with the control room, the crew as human actors are able to control and manage the studio space crew. The studio space in the television requires many technological tools to create numerous connections between various actors in the heterogeneous network. All the operations of news production occur between the main work area, including the studio, and the SCR. This workplace requires staff to deal with digital equipment, for instance, the digital camera, the auto-script (teleprompter), the clip mic and the transmitter, all operated by a digital system (Hartwig, 2005).

2.5.3 Technology tools in the studio and control rooms

This section provides in-depth information on the use of the autocue and the news anchor's interaction with this technological tool. One of the most interactive technological instruments in studio news is the autocue or teleprompter. Zettl (2011) provides a definition of the teleprompter or autocue, stating that:

‘...a prompting device that projects the moving (usually computer-generated) copy over the lens so that the talent can read it without losing eye contact with the viewer’.

(Zettl, 2011, p.470)

The key goal of using the autocue is to communicate between the presenters and the audience (Stanley, 2013). Through this machine, the news anchor is able to read the news and monitor the news script by looking directly at the autocue and the lens of the camera, which are placed together. This technology tool supports the news anchor's ability to drive the text and control the process of news presenting. The autocue system is displayed in front of the digital camera lens by a flat panel monitor of glass plate or mirror system. The news text or image is reflected on the surface of the plate; then the news presenter is able to read it.

Additionally, the structure of the teleprompter software includes programs authorised by the human actors to deal with non-human actors, such as the text and show script. The news anchor needs skills and experience in order to manage the text on the screen an appropriate way. The operating of the machine is based on controlling the text by involving the operator to deal with the autocue tools in several ways, including the manual hand control or foot pedal to move through the scrolls and reflect the information (Kyker and Curchy, 2004). Furthermore, the use of the autocue by manual control or pedal requires practice in order to ensure that the news show proceeds smoothly. In some ingest rooms, one-person functions as the autocue player (an autocue operator) to help the news presenter to display the news. However, sometimes the anchor is by himself or herself and has to control the operation of the autocue in order to read the news script (Trewin, 2003).

Usually, the news anchor has practice in the reading of news before the broadcasting time and also has familiarity with the use of the machines to perform their display functions (Garagiola, 2004). This factor provides the news anchor with the ability to track the news through the autocue effectively and without any problems arising. Another technical aspect of the anchor in dealing with the autocue is making sure that the size of the font is appropriate for the presenter's eyesight.

There are many personal requirements that are necessary for the news anchor to consider at the time of news presenting, such as moving their head from side

to side, speaking naturally, blinking, breathing, making eye contact with the autocue screen and speaking to the machine in a friendly, personable manner. Teleprompter technology offers the workers new skills for dealing with news practice and engaging with the news text and the news script in the final stage of production.

Another technological tool inside the news studio space is the digital video camera. Usually, the teleprompter technology links to the camera and then is connected to the control room. Through this, the news directors or producers are able to transform the activities to the Master Control Room (MCR). Also, there are two or three people operating the camera in the studio area. Often these operators are following the instructions of the news directors or news producers in the control room. The digital camera operator keeps the camera lens in the same direction as the news anchor's eyes or the guest in the studio. Through this technique, the news directors are able to record very good shots of the guest or anchor: they are able to shape the meaning of objects and reveal the eyes of the person who is talking to camera (Cury, 2010). In this manner, the practical skills required from the camera operator to manage their tasks include the ability to interpret and imagine the news director's instructions to visualise the shots and take good shots. The camera operator should have a basic knowledge and understanding of the use of the digital camcorder in the circumstances of the studio.

This makes the digital camera operator more and more responsible for setting up their machine in the workplace to operate effectively. Then the operator is able to use their experience in dealing with the machine to capture the shots and follow the instructions of the studio news director (Millerson and Owens, 2008). Another aspect of studio practice is the Jimmy Jib operator and the technique of moving this tool at the time of the production of news within the workplace. This technique has become one of the most vital features of modern newsroom work. The Jimmy Jib camera or skycam is available to work within the studio and its optimal functioning is based on the space of the studio and the skills of the operator. The use of this type of camera technique provides the

news production team with more interactive characteristics, especially by traveling over the heads of the audience inside the studio.

In contrast, there are many other technological tools that are involved in the process of news production within the control room. This workplace is connected by the automation system directly, including the news studio, the newsroom and the MCR. Also, this workplace includes the human and nonhuman actors that comprise the heterogeneous newsroom network. The nonhuman digital devices include the video monitor, multiple screens, a sound mixer, a vision mixer, a character generator, a camera control unit and the autocue controller. The human actors include the news director, the news producer, the sound engineer, the audio controller, the switcher of vision mixer and the picture editors. All of these community members have direct interaction and everyday dealings with the non-human aspects of the workplace in producing news bulletins.

2.6 Conclusion

This chapter has considered the key aspects of the impact of new technology on the framework of the modern newsroom in three ways. These are the digitisation of the newsroom, news crews and the workplace. The chapter has discussed how new technological tools have changed the ways of news practice within the newsroom. As Siapera and Veglis (2012) argue, 'changing technology affects journalism in several ways, with respect to how journalists do their work' (Siapera and Veglis, 2012, p.). Through this chapter, the researcher has attempted to provide in-depth information on the impact of new technology on the process of news production, journalists' practices and the workplace.

The first part of this chapter reviewed the historical context of journalism and technology changes. Then, presented the topics relate to the newsroom digitisation, newsroom computerisation, knowledge management and the process of editing. The second part discussed the newsroom crew, including the news producer, news director, news editor, news anchor, news reporter and graphic artist. It also explained how technology tools impact their everyday practice, and require skills to conduct their work and their interactions in

dealing with new technology. The third part of this chapter focused on the various workplaces such as the news studio and the control room before turning to the key technology tools that are used in both environments.

The key purpose of this chapter was to provide an understanding of the structure of the newsroom network and the digital workplace. In doing this, the researcher considered the impact of technology on the management of information in the modern newsroom.

Chapter Three:

The Community of Practice in the newsroom

3.1 Introduction

This chapter will look at the COP theoretical framework. The chapter considers the COP as an analytical tool that will support an in-depth interpretation of the news practices in the newsroom community. The key purpose of this chapter will be to explore how the COP model can be applied and account for the journalists' practice in their workplace.

The theoretical chapter will examine the following sections. The second section will review of the background of the COP and chapter review. The third section will examine the meaning of COP in the newsroom. This includes ideas of domain, community and practice. The fourth section will discuss the identity of the journalist within the community. The fifth section will examine the understanding framework of the COP model, including the negotiation of meaning, participation and reification in the newsroom community. The section six will introduce and explain the key dimensions of COP, including mutual engagement, joint enterprise and shared repertoire in the framework of the newsroom. The section seven will discuss workplace learning in the newsroom community. Section eight will focus on the journalists' relationships within their community. The section nine will focus on the COP and technology change. Section ten will examine the virtual community and the ways in which the newsroom becomes a virtual community. The section eleven-will reviews the literatures relate the COP applying in media. Finally, the last section will provide key criticisms and limitations of COP and virtual community.

3.2 The Community of Practice

The previous chapter discussed the impact of new technology on newsroom practice and journalists within their workplace. As was shown, new technology has an influence on the framework of news production in the newsroom. The

present section aims to review the COP model. To will provide an understanding of the community of the newsroom, learning, journalists' identities and news practices.

Wenger (1998) is one of the key scholars who developed the concept of the COP to refer to a group of people who have a common interest in a subject or a problem in the same workplace (Wenger, 1998). Wenger's model allows the researcher to develop a detailed understanding of the community of the newsroom and also explain the features of journalists' practice.

3.3 Review of the Community of Practice

What follows is a discussion of the key concepts related to the COP model. These will be explained in depth and supported by examples from the newsroom field. Below is an outline of the structure of the chapter.

1. The meaning of the COP in the newsroom
2. Key aspects of COP
 - The newsroom domain
 - The newsroom community
 - The newsroom practice
3. The journalists' identity in the framework of newsroom practice
4. The framework of COP
 - The meaning of negotiation
 - The participation of the journalists in the newsroom practice
 - The reification and newsroom practice
5. The dimensions of practice in the frame of COP
 - The mutual engagement in the newsroom
 - The joint enterprise within the newsroom
 - The shared repertoire within the newsroom

6. The COP and workplace learning
7. The COP and member relationships
8. The COP and technology change
9. The virtual community in the newsroom
10. COP applying in media
11. Challenges in applying COP model
12. Applying and limitation of the COP
 - Applying and limitation of the COP physical co-located
 - Limitation of virtual community

The first section of the chapter will refer to the definitions of COP and will attempts to create a connection with newsroom practices. In this research context, the definition 'COP' refers to a:

'..Group of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an on-going basis'.

(Kimble et al., 2008, p.26)

According to the definition, the journalists who share their role in the daily practice and activities relating to the newsroom environment are members of a COP. The COP is based on the relationships between people with the similar identities and practices, who share the same workplace, such as the journalists in the newsroom community. Wenger points out that 'people help each other' (Wenger, 1998, p.76) in order to achieve the goals of the community. In this perspective, the activities of the workplace are based on the relationships between the journalists and the extent of the interaction and support between them.

Following on from this, the researcher will provide an explanation of the meaning of COP in the context of the newsroom by highlighting three key dimensions of the Wenger model. These are the newsroom 'domain', community and practice. The newsroom 'domain' refers to the newsroom community and the common workspace of the journalists in their environments. The newsroom

‘community’ refers to the group of journalists that already has a network in which they conduct shared practice in the same workplace. Finally, the ‘practice’ indicates the social practice of the journalists within the newsroom environment.

This chapter will then discuss the concept of identity, both in the context of the COP model and the journalists belonging to the community of the newsroom. Through this, the researcher will provide an in-depth discussion of the framework of the COP, including the *meaning of negotiation* for the journalists and what they do. Also, the chapter will provide an analysis of the notion of *participation* of the journalists in newsroom activities and the social experience of the actor in the workplace. This includes participation in the news production team. The chapter will then provide information on how the community of the newsroom produces its content by *reification*.

The chapter will provide detailed information on the key dimensions of the COP model, in particular, *mutual engagement*, which refers to the construction of journalists’ relationships within their network of news projects. Also, the notion of *joint enterprise* will be referred to (i.e., the issues and factors surrounding the journalists in order to reach their joint goals within news network production). Furthermore, the chapter will discuss the *shared repertoire* in the newsroom that deals with the common language and phrases that are used between journalists in the everyday life of the newsroom community. Through this aspect, the journalists are able to extend the trajectory of learning whilst participating in the newsroom community.

The chapter will also provide information surrounding the process of *learning* in the newsroom community, in particular during the activities of journalists related to everyday practice and undertaking news projects in the framework of the workplace.

Next, the chapter examines the relationships of journalists in the community of the newsroom, in particular, how they exchange their knowledge and experience and contribute to the learning process occurring in the workplace. The role of new technology will also be discussed in this section. Follow , the

literature reviews relate to COP applying in media. Finally, the chapter will provides key information relate to criticisms and limitation of the COP model.

3.4 Meaning of Community of Practice in the newsroom

This section explores the COP theory and its application to TV news production. It is necessary here to clarify the concept of 'COP' (Lave and Wenger, 1991). Lave and Wenger provides that the COP is the set of relationships between a group of human beings, their activities and their actions in the social world, which, over time, contribute to the achievement of goals (Kimble et al., 2008). The term 'COP' in the television newsroom context refers to the journalists working together, sharing a history of work and having the same identities and practices in the same physical workplace or virtual. In particular, the key focus of the COP model relates to collaborative group work and teamwork. In this perspective, the community of the newsroom is based upon the association between the journalists who conduct collaborative news projects together within the workplace.

In this context, the key social value of the newsroom community is the social relationships between the journalists, which are maintained in order to participate in the processes of news production. In relation to this notion, Wenger and Snyder emphasise the value of the organisation of the community (Evans, 2003). These aspects help the members of the newsroom to share with their knowledge, learning processes and information and through their interaction within the organization or virtual community. COP seeks to produces a new viewpoint on how workers deal with their tasks and find solutions to their problems as well as gathering experience.

For example, the newsroom activities that focuses on producing a news package that needs a contributory experience to achieving the final form of the news item. Another characteristic of the newsroom is the shared news practice, whereby there is an exchange of information and experience from the individuals to groups. These elements provide the community with the ability to develop collaborative skills, as well as the ability to work professionally and thus raise the production level quality. The COP model provides a good way to

explore the expertise and skills of the journalists in the context of the group, offering them a chance to become more effective members in the newsroom community. The application of COP is supported in the newsroom as a way to create new strategies for managing knowledge and creating a space to produce new ideas in the community.

3.4.1 The newsroom domain

Wenger (1998) identifies three key dimensions of the COP model, which are mutual engagement, a joint enterprise and a shared repertoire. The following section will explain these key aspects. The newsroom domain refers to the construction of a common workspace or ground to engage a group of journalists in the same tasks. Through the workplace, the journalists are able to create their long-term connections and engagement and undertake shared tasks. The COP concentrates upon the particular 'domain, which defines its identity and what it cares about' (Snyder and Wenger, 2010, p.110); for instance, the identity of workers in the newsroom community is 'journalists' and they care about producing news items. Workers are able to describe their identity and their sense of belonging to their domain of work and community (Wenger, 2011). The domain encompasses the shared professionalism and interest between the journalists within their field, such as news practice and news media work in the newsroom. The domain draws the boundary of practice in the newsroom, which enables the journalists to decide on their participation in shared tasks, discuss their interests and illustrate their ideas within the workplace (Li et al., 2009).

The domain helps to determine the social value of the community. The shared social values provide the members with more opportunities to share learning and create stronger relationships within the community. An example of this is the role of the news editors, who need help from partnerships with other members of the community to solve their work problems tasks and the newsroom domain provides a context for journalists attempt to discuss and share information and experience in order to deal with partnership situations in the news production network. it also provides a context to find methods to sort

out to problems; if one way is not working perfectly, members may collectively find another way to deal with the problem (Wenger, 2009).

The shared domain assists the journalists in recognising and determining many aspects of their community, such as their identity, practices and the boundaries of their tasks, their responsibilities and the form of relationships among the members. Membership in the newsroom's community domain creates obligations and requires involvement. Also, participation in the newsroom requires the practising of skills, capability, competence and knowledge to focuses on the particular activity at hand (Bond and Blockee, 2014). Therefore, the newsroom domain hosts a specific type of journalist group that concentrates on a particular area of news media practice and news knowledge. The journalists over a long period of time are able to collect expertise in this area in order to engage in their news practice and maintain an involvement in the learning processes (Coakes and Clarke, 2006).

3.4.2 The newsroom community

Wenger (1998) describes the community as a house, nation or land of workers. It provides the members with important elements of learning, such as collecting experience and knowledge as well as an understanding of practice. The people work together in the same workplace and follow up their interests. Through the community, members engage in their activity as well as converse with others and influence each other's practice. Also, the members are able to build work relationships and to construct the grounds for learning their practice.

The community provides more opportunities for the journalists to create and maintain strong relationships within joint tasks and learning experience. The community provides the journalists with enough time and space to learn new ideas acquire knowledge and create an efficient interaction between the members. Wenger (2011) refers to collective learning as an important ligament between the workers in the community over time, ensuring they accept each other and work together. Also, collective learning is the outcome of the reflection process in the community project and tasks (Lave and Wenger, 1998).

The community of the newsroom offers the journalists the opportunity to learn more, interact better and transfer ideas and experience between them in efficient ways. Also, the emergence of practice in the newsroom allows the members more knowledge about what happens around them, and to obtain more skills to manage their tasks. Through formal and informal conversations among the members in the newsroom, the tasks become sensible and easy to interpret and understand. Also, the community's members attempt to improve and progress in their relationships with others in the workplace. Consequently, the journalists are able to strengthen their relationships and build their trust with other members in the community (De Surie, 2008). Hence, the key goal of building trust between the journalists in the community is continuous and based on the conversation, the relationships and the discussions within the workplace. Through this structure, the community is able to create meaning for the news practice and construct professional skills for their members.

3.4.3 The newsroom practice

Collective tasks are an important component of the social practice in the newsroom community (Marsh and Doel, 2005). There are many tasks conducted in the newsroom that are accomplished by teamwork. Wenger (1998) argues that the practice refers to the participation of workers in their daily activities, which include explicit assignments, a common language and practices created through the use of new technology (Williams, 2013). Through these practices, the practitioners are able to develop their joint repertoire and other information resources (Bond and Blockee, 2014). These aspects include many resources of news practice, such as providing daily experience in conducting news practice, everyday interest stories, the ability to deal with new technological tools and documents, and the ability to make informed choices regarding the most suitable methods to tackle their problems (Wenger, 2011).

Wenger describes practice as a form of social acting and a useful approach to individual learning in the community. The newsroom, as with other communities, has particular social practices for producing news. Hence, the COP has become an important source of workers' knowledge for developing and

driving their practice and driving changes in the organization (Brown and Duguid, 2001). Wenger and Lave (1991) define the COP as a system of work that organizes the relationship and learning processes in the social world. Through these processes, the journalists are able to produce news by sharing news resources and experience as well as practising daily activities in their community.

Another key feature of 'practice' is how members perform reconfigurations, constructing and re-creating imaginings surrounding identity in the circumstance of work (De Surie, 2008). The journalists' engagement in the news practice offers them a chance to deal with many colleagues and a variety of viewpoints as well as a news repertoire in order to produce their news packages. For example, the job of news editors in breaking news is to deal with many workers within the framework of news production, including the cameramen, field reporters and news producers. This provides the news editors with an understanding of issues surrounding the news stories and how to design them. Furthermore, the individual journalists within the newsroom are able to perform many tasks, such as writing, editing, organizing information and selecting information resources for their news stories (Van Hout and Jacobs, 2010). The engagement of journalists generates more interaction among the newsroom members. Hence, the frequent involvement enables the members to understand the meaning of their practice, values and creating a new atmosphere of meaning negotiation (Wenger, 1998). Journalists' everyday life, routine, acts and engagement are similar tasks shared with other communities of practice. The daily practice makes the journalists more familiar with the situation and the reality of the workplace as well as the community's activities. Thus, the regular interaction of journalists encourages them to obtain new knowledge about their identity and role within the community of the newsroom.

3.5 Journalists' identity in the framework of newsroom practice

Identity 'is a fundamental element to understanding the evolution of COP' (Hernández, 2011, p.71). Wenger (2009) illustrates the notion of how the

community 'acts as a nation and home' for its practitioners, and that this home is a place of belonging for the members. The members are able to act in their domain efficiently as well as maintain their personal identity. This situation makes the members aware of belonging to their community and place of work, such as the newsroom. Also, they seek shared understandings and to be sensitive about their identity with other members (Coakes and Clarke, 2006). The term 'members' identity' refers to the journalists' understanding of their practice, their selves and their views about themselves. This aspect includes the members' views about their identity and how they look to their identity in the same community in order to accept their roles to join in all activities in the workplace (Wenger et al., 2002). It offers the journalists with an efficient way to understand the news production environment and how to interact with other members.

Through identity, the newsroom journalists are able to understand their roles and positions within the context of the community. Identity helps workers to answer, 'What is their role in the community'. This includes the position of journalists, the relationships with other members and the interactions in the newsroom community. As well as the social role of the journalist in the network, their positions in achieving the news tasks and practice (Davis, 2006). It helps the members of the community to think about themselves in terms of what Wenger mentions as 'who I am' and 'who are they?' As news workers, what are we able to do in this domain or social network? (Wenger, 2009). Through the personal identities established, the members are able to recognize how other practitioners construct a professional practice in the news organisation. This depends on shared work, such as joint projects and joint interests among the journalists in the workplace.

The identity of the newsroom practitioners is based on the understanding of journalists performing many tasks within their daily routine. Therefore, identity becomes a big aspect of the process of learning in the newsroom, which supports the members directly in accepting new information and other experiences as well as acquiring knowledge to carrying out their assignments (Cox, 2005). The understanding of journalists' daily practice provides them with

the ability to build and develop their identities within the newsroom (Davis, 2006). There are strong links between the journalists' experience and the identity of work that is created by practising the same tasks in the community.

3.6 The framework of Community of Practice

This section will briefly explain how the basic process of Wenger's framework for the COP can be applied directly to the newsroom. The first section will discuss the notion of the meaning of negotiation in order to understand the community of the newsroom. The second section will examine the term of the participation of journalists in newsroom activities and news practice. The last section will provide information about reification and its role within the community network.

3.6.1 The negotiation of meaning

In the COP concept, meaning is a vital property for understanding the COP and everyday life. Wenger and Lave (1991) expand their argument surrounding the concept of COP to identify three key aspects, which comprise the practice, identity and meaning (Hernández, 2011). These main aspects are related to the daily experience, the learning process and the activities of members in the social world. In this way, Wenger (1998) acknowledges that the participation (as journalists) in the COP has formed not only what practice they do, but also who they are and how they understand what practice they do (Stommel, 2009). Negotiation of meaning and identities is a fundamental aspect of the Wenger model. The journalists in the newsroom community attempt to conduct their research and find the meanings to everyday life, such as the purpose of daily discussions in the newsroom. The journalists effectively attempt to engage in the practices in order to understand and have a clear view surrounding their practice. During this process, the news worker is able to construct his or her own knowledge to manage the news practice. The journalists' negotiations focus on their news tasks and how they carry out their projects. In this framework, the journalists are able to ask questions and explain and exchange ideas with their colleagues in order to jointed find the meaning of their practice, for

instance, news editors' negotiations with other news crew members to rephrase the news items, add information or to create the final form.

As Wenger (1998) argues, the engagement of the practitioner in the social world is the primary stage for the procedure of the negotiation of meaning. The workers in the social world and community generate meaning for their practice, position, tasks, activities and responsibilities in their framework (Lave and Wenger, 1998). Through negotiation and acting together in the same area of work, the journalists are able to find joint meaning for their everyday life in the community of the newsroom. From this viewpoint, the collaboration and joint work of the journalists are important in order to co-build the knowledge of work that is linked with others' procedures in the newsroom operation (Kimble et al., 2008).

The negotiation of meaning is rooted in the history of the learning process and practice in the workplace. A major part of community resources is used for continuing the shared history of learning, experience and knowledge between the members in the circumstance of the practice (Evans, 2003). Moreover, the negotiation of meaning, as Wenger mentions, is connected with two processes. These are participation and the reification, to be understood as a dual term (Hildreth, 2004). The negotiation of meaning is an open procedure: it is a long-term reform process for discovering and reproducing new elements in the community (Wenger, 1998). Through news practice and developments in the newsroom, the journalists have the ability to generate the negotiation of meaning between the workers in the workplace (Karagiannis and Reimer, 2002).

In general, the terms of negotiation are established through the members' social discussions, as well as their professional collaboration in the community. For example, the journalists in the newsroom have experience of conducting their everyday news practices and tasks and sharing their activities. These includes, for instance talking about their practices, sharing their life stories and sharing coffee time with other members in the same workplace. These types of relationships with other members and colleagues provide the members with

opportunities to generate conversation skills, contribute towards co-working as well as share tasks in the community. Through this engagement, the newsroom journalists are able to control their tasks and find a way to tackle their problems. This is helpful for creating a new circumstance of work and produce meaning for their practice as well as identity. Therefore, meaning is created inside the community and helps to re-negotiate all the past understandings, skills and experiences (Rowland, 2008).

The negotiation of meaning is an essential factor that leads to and drives change in the scope of the community (Honig, 2006). Learning processes are accepted through the negotiation of meaning between the members of the community. For example, the news crew is required to discuss issues together and decide collaboratively how they should cover particular events. Through negotiation, they accept a form of news item and how they will produce it. During the negotiation with members, they are able to share and use information from the discussion in order to find new meaning for their practice and accept, as well as maintain, the key goals. Hence, the negotiation of meaning in the newsroom provides the journalists with a new way to discover new ideas and information. This is shown in activities such as the daily meetings at the newsroom, the morning conference regarding the agenda, and the organization of group work in the fieldwork.

3.6.2 Participation of the journalists in the newsroom practice

In this section, the concept of participation in the community will be discussed. Wenger (1998) provides a definition of the concept of participation below:

‘To describe the social experience of living in the world in term of membership in social community and active involvement in social enterprises participation in this sense is both personal and social, it is a complex process combines doing, talking, thinking, feeling and belonging. It involves our whole person, including our bodies, minds, emotions, and social relations’.

(Wenger, 1998, p.55, p.56).

In this way, the concept of participation in the newsroom focuses on the social experience of the journalists within the workplace.

There is 'a form of participation in a COP by which individuals take less intense membership' termed as 'peripheral' by Wenger (Coakes and Clarke, 2006, p.13). This is very often the situation that new staff find themselves in to move from the peripheral staff need to participation in the news activity. Different levels of journalists' participation in the activities and news tasks, for instance, participation of the old journalists in the pre-production, production and postproduction stages is different. In the same way, the newcomers to the newsroom community have a different level of participation in the news projects. Newsroom members participate in different types of actions, some for them in the long term and others, in the short term. Also, the involvement of the practitioners is based on many factors, such as the position of members, experience, the size of the project, skills, the way of thinking of the workers in their field as well as how they contribute in the community, that are all varied and depend on the type of member and their role (Wenger, 2009).

The term 'participation' is focused mostly on the social experience of people as they conduct their practice and actions in the workplace. The effective engagement of practitioners in their social actions and the social world is important (Portelli, 2010). Through this engagement of the journalists, they are able to become involved in the processes of learning, in order to obtain understanding and create new experiences. These in turn shape their tasks and allow them to find meaning in their practice in the community. These are important elements that make the social world more favourable and successful for the members, in particular, in their tasks and news actions. Furthermore, the active participation of the journalists brings more interaction to their community and their involvement in the social world (Julian, 2010).

Participation is the key aspect of the newsroom community and processes of learning within the workplace (Barton and Tusting, 2005). Through these elements, the members obtain their ideas and engage in the process of learning in order to obtain new ideas about their news practice in the workplace. Also, it

refers to their interaction and allows them to identify better with other members of the journalist crew through the social activities of the newsroom (King, 2009).

Participation is thus based on many elements, such as the negotiation of meaning, the creation of ideas and sharing among the members in order to shape the process of learning as well as their identity in the community (Lyons, 2010). The negotiations of meaning in the news practice are interrelated with many factors, for example, participation, construction of the community, member identity and learning processes (Portelli, 2010).

3.6.3 Reification and newsroom practices

In the context of the COP concept, participation and reification is defined as the social experience of members that deal with the situation of the practice. Furthermore, both participation and reification drive the community members to engage in the process of learning and development in order to identify the community members (Portelli, 2010). The next section will explain the term 'reification'.

This section will examine the concept of reification. The term 'reification' refers to 'the making of a thing' (Tully, 2005). In this way, reification means building something into an object or thing. Wenger, provides a definition of the meaning of reification stating: 'reification refers to the process of giving form to our experience by producing objects that congeal this experience into "thingness"' (Wenger, 1998, p.58). Accordingly, the term 'reification' is an essential aspect of human activities and practice, particularly in the social network. In this way, the community of newsroom activities focuses on the production and creation of news items, particularly the editing of information and creating news packages. The journalists attempt to make and build the form for the news item by their experience.

Reification 'is largely a collective process, but it shapes our personal experience of the world as well' (Tsui et al., 2008, p.37). The community's members make a particular reification of their knowledge, experience and ideas in order to

produce a thing (Ingold and Pálsson, 2013). Thus, the form of everyday life experience is an essential part of the journalists' characteristics in their social world and the processes of reification, in the newsroom is evident in the use of tools to conduct practices and change the forms of information to create a news story (Murphy and Hall, 2008). Wenger (1998) illustrates how reification is the process to provide a form for our knowledge, our experience and our opinions by creating form for 'things'. This reification includes many elements, such as making, designing, representing and describing things (Wenger, 1998, *ibid.*). In the case of the newsroom, these components are reflected directly in news production, for instance, when the news editors began to create news stories by making, designing and describing stories and then presenting them in the final step. In this way, reification refers more to the description process of creating and producing things and using artefacts (Kernick, 2004). Hence, reification includes the objects that are produced as a result of human activities and those human actors have a role in the process of making things (Stommel, 2009).

In this perspective, Wenger emphasises that participation in the COP is based on reification (Barton and Tusting, 2005). This means that both participation and reification complete each other in a form of mutual engagement (Wenger, 1998). The activities of journalists in the workplace, such as the processes of writing, editing and designing and planning of news programmes, refer to area process of reification (Yao and Yao, 2005). Consequently, the concepts of reification in the newsroom have many different forms and shapes: some of them are concrete and others take an abstract form (Wenger, 1998). Examples include information management systems, a quiet or crowded workplace environment, physical movement, ideas, and knowledge. Also, the anxiety of workers has to be considered as reification; when they make mistakes, they may use signs and body language during broadcasting.

3.7 The dimensions of practice in the COP framework

This section will examine three fundamental key dimensions of the COP, dealing in particular with the practice as part of community. The first subsection will discuss mutual engagement in the social newsroom network. The second will

focus on the joint enterprise to conduct a professional news practice in the newsroom community. The final subsection will deal with a shared repertoire and the style of community speech, language use and everyday phrases between journalists within the community of the newsroom.

3.7.1 Mutual engagement in the newsroom

This section will examine another aspect of COP, which is mutual engagement. This term focuses on the social network of the journalists in the newsroom. It refers to the involvement of members in the action and practice that is mutually formed in the workplace. The mutual engagement of workers occurs when the members creatively work together and share their methods of news production in the newsroom. This factor has a big impact on the development of correlative relationships of members in the COP. In the case of the newsroom, the journalists are responsible for co-creation activities and discussing jointly production (Carbonell and Stephanidis, 2003). This aspect is based on the interactions, connections and relationships among journalists in the workplace. This aspect offers the journalists more possibilities for finding meaning and fulfilment in their practice and conduct, as well as seeking improvements in their work relationships (Holmes and Meyerhoff, 1999).

Mutual engagement occurs mostly in the framework of the workplace action, specifically, when 'people help each other' (Wenger, 1998, p.76). This includes situations such as the news meeting conversations about the daily agenda between the news producers and news crew when covering special news events. Also, the mutual relationship among the practitioners is reflected physically in the meetings and daily discussions of workers, particularly when developing their ideas, sharing their stories, or when knowing how to get or do something new in relation to their news practice in the newsroom.

The mutual engagement of the journalists is influenced by the new technology, such as the new system of information management in the newsroom (Avid technology). After the introduction of new technology, the community members are able to contact each other and jointly conduct their work without making as much effort or expending as much time. Also, the automation system provides

more flexibility for the community members, especially when communicating with each other by email, sending messages and sharing ideas with each other (Carbonell and Stephanidis, 2003). Moreover, it provides the journalists with the ability to continue in their relationships, share their collective understanding and further their practice and knowing about their roles in the community (Hellermann, 2008).

Wenger (1999) has argued that mutual engagement requires more interaction between members to develop their practice, ability and skills. This includes the activities of workers conducted together in the same workplace. These elements include the level of communication, project knowledge sharing and the facilities of the environment for practice (Kimble et al., 2008). Mutual engagement provides the circumstances for creating connections between the members who work together and, consequently, for creating a social network. Another factor that supports mutual engagement is the community rhythm (Schiavone, 2014). The rhythm of the community is reflected in many activities in the newsroom, such as the morning meeting, connecting between work by using network technology and organizing regular activities within the newsroom. These activities and actions of the journalists directly provide a dynamic to the community.

The newsroom automation system provides an important link between the community members in the newsroom. One aspect of the impact of new technology is its ability to create a co-located workplace for the members in the community. In other words, technology can link communication between members in the newsroom, the control room and the studio room or even the field of news at the same time. New technology tools in the newsroom also play an important role in promoting learning and creating a flourishing learning environment for members. The news media technologies are collaborative tools and provide many facilities for the news practice; for example, the journalists are able to use the necessary tools for collaborating with other news practices and for socialising in their everyday life (Tan and Subramaniam, 2006). This mutual engagement factor provides the journalists with the facility to improve their relations and also increase the role of human actors in in-group learning

engagements. The shared practice, information discussions and illustrations subsequently have an effect on the form of mutual trust between the workers in the community in terms of improvement and progress (Cronin, 2004).

3.7.2 The joint enterprise within the newsroom

This section will examine another characteristic of the COP: joint enterprise. Practically speaking, the joint enterprise is an extension or reflex of mutual engagement (Julian, 2010). The term is described as 'the joint enterprise as joint purpose for joint action, or perhaps higher levels of the joint action' (Evans and Pourcel, 2009, p.407). It is based on the frequent processes of negotiation and understanding between the community members in order to reach the professional practice and goals in the social network. The journalists in the newsroom have joint aims and strategies and collective understanding for their actions and plans for the joint enterprise. The joint target of journalists is reflected in the many meetings, activities and actions in the workplace; for example, the concept indicates the negotiation of journalists in order to obtain a full understanding about their practice in a shared project. In this way, the key question is: what do the journalists do within the framework of the newsroom? And, what purpose do they want achieve in their workplace?

The development of the joint project is related to the response of the community members to their situation of work, especially in the aspects of the group discussion and mutual relationship between them (Hoy and Miskel, 2004). This point provides the journalists with the ability to work collaboratively as well as independently and keep their connection together as one community.

The joint enterprise is influenced by mutual relationships between the members and is regarded an essential part of the COP. Wenger (1999) illustrate how joint enterprise exists as an influential factor in our practical life in the community. This aspect of community provides the journalists with engagement in the processes of negotiation in order to build their contributory practice and create the goals for constructing their enterprise as well. It is reflected directly in the members' negotiations and their understanding of their role inside the

workplace. The joint enterprise provides the journalists with way to create a sense of mutual responsibility and undertake mutual tasks in the workplace. As mentioned, the community of the newsroom is based on mutual involvement in the news operation. It offers the journalists the chance to build their relationships through negotiation and find new meaning for their daily lives in the newsroom.

A key aspect of the joint enterprise concept is the ability of members to work together, engaging in the same project and keeping the members of the community jointly occupied. It is more like a coordination of the activities in the workplace, which is the basis of the collective understanding of journalists for their practice (Kimble et al., 2008). This type of joint work deals more with collaborative work, sharing projects and co-operative tasks undertaken in the community. In this way, the collaboration work in the newsroom means that the tasks match the goals: for instance, the news producer, news editors, graphic designers and news directors all discuss daily how they want to achieve the same target and the same conditions of work.

The newsroom practice describes the journalists conducting their tasks as a group within their work environment. Working together offers more opportunities to create joint enterprise, joint projects and joint actions. Also, the collaborative work provides more opportunities for team members to deal with resources, to have a good understanding of circumstances and to generate new ideas and produce successful news packages. Undoubtedly, the news crew share experience, knowledge and their ideas in order to resolve problems that they face in the newsroom (Mezgár, 2006). Hence, the community as a joint practice allows the journalists to share their domain, purpose, knowledge and experience to make the social network more stable.

3.7.3 The shared repertoire within the newsroom

This section will discuss the shared repertoire of the COP. Meyerhoff (2011) indicates that the 'shared repertoire is the speech style, but also, includes other social practices' (Meyerhoff, 2011, p.200). The core model of COP focuses on the

group of people that share actions and identity with the same practice. Wenger defines the shared repertoire as:

‘... routines, words, tools, ways of doing things, stories, symbols, genres, actions, or concepts that the community has produced or adopted in the course of its existence, and which have become part of its practices. The repertoire combines both reificative and participation aspects’.

(Wenger, 1998, p.83)

These elements are related to the journalists in their engagement with the processes of learning within the community as a place of learning and working (Wenger, 2011). According to a previous definition provided by Wenger, the COP focuses more on establishing the members’ lifestyles in everyday life in their workplace, such as a family. In this perspective, the family as a unit struggles to construct a suitable environment of life for their members within the social world (Wenger, 1999).

The information resources of the newsroom offer the journalists opportunities to exchange their knowledge and to understand their language and communication output. This includes words, vocabulary; their uses of slang; symbols; words and also their own language in the workplace (Naeve, 2007). This aspect of the community allows the journalists to communicate and interact with other members.

The relationships between the journalists are based on three key aspects of repertoire, which are collaboration, narration and construction. The shared repertoire is constructed to reproduce and preserve the COP (Boud et al., 2006). In this situation, the journalists are able to exchange information and knowledge among themselves in order to manage their work through conversation and negotiation. This supports community members understanding and dealing with their circumstances of news practice.

The journalists in the newsroom community have formal and informal forms of interaction, including meetings, conferences, coffee time discussions and social

activities. These opportunities for discussion provide the journalists with a high level of engagement directly in the shared enterprise, joint expertise and activities of the work environment. These contexts require members to have an extensive shared repertoire to support the mutual engagement and joint enterprise. These three dimensions help the community's members to improve their work knowledge and practise the common language of communication (Gössling et al., 2007).

The information and knowledge repertoire of journalists in the newsroom as a community covers many aspects. These include information and knowledge shared in everyday work, such as engaging in the news practice, face-to-face meetings and general interaction in the newsroom between members. These opportunities to exchange knowledge encourage and promote many characteristics of the community, especially the development and learning of shared repertoire. A relevant example of this is the daytime plan and discussions in the newsroom, whereby specific signs and language are used, such as shortcuts, vocabulary, symbols, codes and style of chatting that allow them to understand each other efficiently. These language styles must be shared by all members in the community in order for them to be understood and to communicate effectively. Furthermore, the community's members have shared events and activities, such as work stories, beliefs, jokes, shared consideration, social values and local traditional acting that combine with social activities. All of these events require shared knowledge and information amongst members in order for them to operate successfully. Thus the exchange of knowledge is an important part of the newsroom practice and newsroom culture (Wenger, 1999).

3.8 The Community of Practice and workplace learning

This section will provide an examination of the process of learning and COP in the context of the newsroom community. Firstly, Wenger (1998) demonstrates that the process of learning is based on the following assumptions:

‘... the learning process situated in the geography of practice and identity, then, how learning as social process creates these

geography of practice and identity that we situate ourselves as meaning, making beings’.

(Edge Hill University, online video, 2010).

In this context, the newsroom is a particular geographical environment: it situates itself within the news practice and identity of the journalists. Thus, the members are able to engage in the learning process situated in their newsroom whilst belonging to their community. The processes of learning happen everywhere, however, and are not only limited to a particular, geographical workplace, community or organization that is shaped for this aim (Rodgers et al., 2005).

There are many elements that play an important role in the newsroom in supporting the processes of learning in the community. Lave and Wenger (1991) discuss how human learning is an essential aspect of the social structure and the social learning system of community. Also, they refer to the main aspect of social structure practice in the workplace as the role of the individual worker and the group in the community determining the shape of learning, responsibilities and tasks (Wenger, 1998).

It is natural for human beings to learn more by being involved in social activities in the social world: ‘learning is a social aspect and comes largely from experience of participating in daily life formed’ (Bligh, 2014). The COP becomes a trajectory for the processes of learning for the members, and subsequently the journalists are able to obtain new ideas and gain their experiences from their community. In this context, the journalists are already members and belong to the community: they conduct their practice and obtain their identity from the same group of people. To illustrate, the journalists become members in the morning meeting, which acts as the boundary of their action, practice and identity. Through this meeting, the journalists conduct many negotiations and discussions, listening to each other and talking about their experiences of dealing with particular news items. Also, there is great value in belonging to the community of the newsroom; the journalists have the potential to help each other (Wenger, 2009). Regarding morning meetings and other sorts of activities,

the journalists are engaging in the process of exchange information, experience and involvement in the processes of workplace learning. This engagement of journalists is constructed through many interactions and challenges between the members within the community. Also, this situation provides a type of curriculum, teaching the journalists more about their practice (Wenger, 2009).

Within COP processes of learning refer to social action, which is created by the participation of the members in the everyday activities and engagement in the social world. Hafler (2011) introduces the special situation of professional learning as an example, whereby the members of the community obtain knowledge through their collaborative interaction in the learning place and the ability to observe other people (partnerships). This provides them with the ability to rethink and rearrange their information about their practice and learn something new to perform their tasks.

The COP model focuses largely on social practice, relationships and the participation of members in their daily actions and duties in the context of the social world (Waller et al., 2011). Wenger (1998) identifies how the COP is an essential part of the social learning system. Members construct their sense of belonging to the newsroom during attempts to organize their relationships. These aspects provide the journalists with the ability to recognize their identities, positions and responsibilities and to improve their self-experience when practising their tasks within the newsroom community (Wenger, 2009).

The newsroom community has many interactions, activities and joint projects that provide members with competence and make the community more dynamic. This aspect supports partnerships and allows members to understand the ways of work and practise their task within their set of circumstances, in particular, when the members start negotiating a particular assignment. Through these productive tasks, the journalists discuss and share their ideas about how to shape their news items and talk together to deal with the news operation. The conversation of membership supports them in being able to provide the newcomers as well as old journalists with the chance to engage in

the learning process, create new knowledge and solve their problems to produce news items.

The development of the learning process in the newsroom community depends on the extent of practice type, activities, workplace design and joint projects. The reason is that learning as a social process creates identities for the workers and the opportunity to engage in similar practices amongst other members within their community (Wenger, 2011). Another benefit of journalists' engagement in social learning is to attempt to gather knowledge about practice when dealing with problem solving and understanding collaborative work (Ipgrave et al., 2009). These elements provide the community with an effective environment for learning and help to construct a physical, social place for learning (McLaughlin and Talbert, 2006).

The nature of the community determines the characteristics of the learning processes. This aspect of community includes the practice, action, relationships, tasks and patterns of journalists in the newsroom, which have numerous roles for determining the form of learning. The human actors are able to understand each other, recognise their ability to generate new ideas and create knowledge to develop the process of learning in their circumstances. These elements help the community to redefine their workers' positions and roles in the context of the workplace. This is impacted by the use of new technological tools, which support the processes of learning and make it faster and more efficient. To illustrate this, the information management system enables the newsroom journalists to work more efficiently, to engage in tasks expeditiously and to conduct their professional practice in their arena. In particular, new tools ensure that the journalists collaborate and exchange information effectively in order to conduct their professional practice (Hara, 2008). Also, the technological equipment creates a powerful interaction between nonhuman actors (Avid technology) and human actors (journalists). The use of nonhuman/human actors and facilities include the use of e-mail, instant messaging, online connections and electronic comments. Consequently, the workers have a central position for using technology for sharing practice and learning more during their engagement in the community, whether it is through

interactions with nonhuman or human actors (Schiavone, 2014). The participation of the practitioners provides individuals with the ability to obtain more experience from their community in dealing with their circumstances as well as offering the opportunity of having an experience with people with different levels of knowledge and expertise.

3.9 The Community of Practice and members' relationships

This section will discuss the important of relationships in the context of the COP. The COP concept is based on the relationship between human beings in the social network. The members' relationships are one of the most vital parts of the COP. Wenger (online video, 2009) argues that the COP is established on the relationships between the members of community. The relationships of journalists in the newsroom community are focused on the everyday life relations between the members within the news organization. In the context, COP focuses more on the association between the journalists in the newsroom, which includes face-to-face, everyday interactions among news managers, media composers and news producers.

The newsroom as the geographical environment of the journalists' community offers the chance for everyday discussions. This generates a wide space for the practitioners to manage their relationships and create dialogue for their viewpoints. Hence, the modern newsroom is a place for the journalists to learn skills and to organise their relationships by participating in workplace tasks. These types of relationships in the newsroom are called 'social relationship of production' and are created within the news production network (Hodson and Sullivan, 2011). These are built on journalists' one-to-one regular interactions with other members, such as the relationships between news producers and editors within the workspace (Davoudi and Shabaani, 2012).

This exchange between members provides them with the ability to think about how the members understand their connection in the social structure and the social world (Kajee, 2008). Wenger (2010) points out that during the process of identification in the community, the practice, community of members and the relationships all become part of the members' identities. These elements are

directly reflected in the relations between the members of the social network and the journalists as human beings. Also, the relationships between the human and non-human actors allow us to know about the level of journalists' affiliation with other colleagues in the community. This includes all journalist connections, associations and dialogue in the community of the newsroom in relation to their work (Rothwell and Sullivan, 2005).

The relationships between the journalists in the newsroom are built on the mutual trust gained through involvement in in-group tasks and through helping each other in the social framework. One example of this is the existence of a trust element between the journalists in the newsroom, which contributes to the ability of engaging in collective thinking and learning in the workplace. The building of trust enables journalists to join in social acting inside the news team, whilst providing them with more opportunities to achieve their mutual objectives. There are many components in the newsroom practice that provide mutual practice, joint understanding, shared goals and co-working opportunities for the community's members (Roberts, 2006).

The newsroom operation requires the participation of journalists in activities to help produce the news package, for instance, the engagement of the news producer, graphic designers, news editors and news directors in order to produce the news item. Thus, a high level of trust is key to successful operation between the journalists in the newsroom. This has a profound effect on the community's ability to develop as a whole, and engage in social learning processes in order to create a joint culture. The trust between community members allows the journalists to carry out more discussions and exchange more information about their work projects. Furthermore, the trust offers individuals the ability to think, to understand and to recognize the newsroom journalists' identities. This provides the members with a good way to build their behaviours and performance of news practice in the community (Wenger, 2013). Every member of the community benefits when undertaking panel discussions regarding daily production, strategies of work and news plans. Through relationship building, the journalists are able to identify each other to co-work, share their responsibilities and work on joint collaborative projects.

This type of contribution has a huge impact on the processes of news production and the capacity of the journalists to do their work in a successful way.

3.10 The Community of Practice and technology change

This section will examine technology change in the community of the newsroom. Technology change has affected reconfiguration, re-building and re-thinking profoundly in the community of the newsroom. Schiavone (2014) argues that the COP has been impacted considerably by new technology change. The technology tools are related to the newsroom community within the space and time of connection among the journalists. The technology tools further affect the learning processes of journalists and the ability to build collaborative work in the organization (Yang, 2009).

New technology provides journalists with the ability to change their ways of managing their practice, generate new routes to conduct their practice and promote the community's members to interact more. As a consequence, the members' knowledge has grown in two ways, individually and collaboratively. Specifically, the facilities of an automated newsroom system create an effective link and a strong connection between other areas of news practice inside and outside the station. The system provides new methods of discussion and conversation about the processes of learning and knowledge production in the community of the newsroom (Barton and Tusting, 2005).

In the newsroom community, news technology has become a central concern for supporting the processes of learning among journalists, for instance, by improving workers' skills and developing a multi-task experience. Furthermore, the technology has aided workers' skills related in creating, modifying and transferring new knowledge, allowing them to change their behaviour in the social world (Borzillo, 2007). Other features of the newsroom affected by technology include management of shared projects; problem solving and shared interests surrounding matters between journalists. In the social network, the technological tools provide the journalists with more facilities to allow them to

deal with an interactive workplace, particularly Avid technology in the newsroom. Schiavone (2013) argues that 'the new technology can provide a community with new complementary tools and instruments for the development and improvement of performance of their core practices' (Schiavone, 2013, p.47). These technology tools offer the journalists more flexibility to collaborate in their work, in the same community physically or in a virtual space. Also, it provides more opportunities to create an effective relation and network among the members' entities. Additionally, the members are able to deal with resources and have access to the community effectively (Polin, 2010).

Through the Avid system, the journalists are able to become involved in all the operations of news production and achieve their goals. Also, the modern newsroom gathers both features of the community, the face-to-face ones and the virtual community. This offers the journalists the opportunity to interact more and edit their work by putting the news package in the same-shared box. The members of community are then able to access the news item in a simple, efficient manner, allowing them to add, organise and edit the shared information.

The new technological tools help the partners to share knowledge, their ideas and information among the community of the newsroom in professional ways. In particular, the automated system that is implemented in the newsroom provides more opportunities for journalists for understanding the shape of the social activities and the social world. Also, these facilities allow the journalists more control over the information resources whilst creating good strategies for managing their circumstances. The automation system provides more interactive tools, for example, live chatting, group discussions, messaging, feedback and commenting. Through this aspect, the journalists have a lot of opportunities to interact, contact and be involved in discussions about their projects. The journalists are able to create and maintain their connections in a perfect form regarding everyday practices, such as communicating, exchanging knowledge and information, controlling all operations and organizing their daily

and weekly meetings (Schiavone, 2013).

The use of Avid technology has supported the rebuilding of communities of practice, providing a great opportunity for the learning process and practice (Hoadley and Kilner, 2005). In particular, the technology allows for journalists to deal with many elements in the environment related to the development of their skills as journalists in the community. For instance, the learning operation happen when the members have purposeful tasks, and interact and chat together (Hoadley and Kilner, 2005). The technology tools support them in exchanging information, accessing resources and accessing other journalists' communities.

3.11 The virtual community and the virtual newsroom

This section will discuss the meaning of the virtual community and how the newsroom has become a virtual workspace. There are many similarities and differences between COP and the virtual or online community (Wenger, 2009). The virtual community is based on many essential elements, such as the partnership, influence and achievement of shared goals. The members feel a sense of belonging to their community, and there exists a shared relationship between themselves within their groups (Leimeister and Rajagopalan, 2014). The virtual community is one where people can act together via using the Internet using technology tools and network connections to communicate between them.

Virtual teamwork allows members to participate in joint projects, produce materials, share ideas and exchange experiences in the context of the network system (Shi and Li, 2004). Also, the members of this community are able to create and maintain their social relationships with other members within the specific boundaries of cyberspace (Tilley, 2008). Thus, the construction of the virtual community is based on the Internet through its network links and tools. While using various forms of social media and tools, the members are able to assess and manage their relationships without meeting face-to-face. Moreover, the work in the virtual environment requires different skills from the members

to deal with the virtual context. In particular, the key challenges that practitioners have to face are to coordinate their tasks, the use of a variety of tools, their time management and their interaction space. However, it can provide more opportunities for members to share their ideas and create effective connections among themselves in the online community. The virtual community includes many aspects of social practice; for example the socialisation aspects including online conferences, sharing daily stories, exchanging information about work, writing comments, sending messages and sharing jokes (Camarinha-Matos and Afsarmanesh, 2003). For example, the news reporter I-pad field (see chapter 1, section 1.3.6.1)

The virtual community of the newsroom began when the news reporters moved to the field to transfer the news and live events via satellite newsgathering. In this situation, the only way to establish a connection between the newsroom crew in the station and the news reporters in the field was through technological tools such as the satellite newsgathering truck. The news crew in the field attempts to follow the key goals of the news producer and transfer the information, news footage and interviews to the news hub via technological tools. Hence, the news crew in the field have become virtual members of the community by connecting with the newsroom crew via technology. Through the virtual newsroom, the news reporters in the field have the same ability as news editors in the newsroom to access information, journalists and the automation system and act in a flexible way. This aspect of the virtual newsroom allows the news reporter to manage and access the breaking news in the studio from the field. These aspects of the virtual practice significantly increase the accuracy of their news items, the access to information and checking their ideas, providing a great opportunity to communicate to the news crew in the newsroom station (Pavlik, 2001, p.107).

3.12. COP applying in media

There are few publications regarding the application of the COP model as a theoretical approach in the field of media. One of the few applications of COP is

Husband's (2005) work that addresses the situation of minority ethnic media production by employing the COP model in the case of the Iraqi journalists community, focusing especially on the existing tensions between the minority ethnic media practitioners in relation to their commitment to professional identity and status. Husband attempted to show that this results in tension within the professional media practice and those engaged in political activism. Also, the author describes unique facets of the minority ethnic media by highlighting the comparisons of the majority media system.

García-Avilés' (2014) qualitative interview work explores and examines ethical conflicts issues in the context of an online digital newsroom environment. Through this article, the researcher examines the key challenge of convergence and the requirements of the online news production framework that faces the journalists. The author has indicated the key factors that influence the online journalists' ethics in the context of their online practice and production. The key findings illustrate that there are common values are collaboration between the members and practice in the circumstance of the digital online newsroom.

The work of Eldridge (2014) has discussed the case of subtle and nuanced language in news texts from WikiLeaks servers to invalidate WikiLeaks extensive and persistent claims of being journalism (Eldridge, 2014). The key findings of this paper show the differences in discourses of distance employed in boundary maintenance processes among the members within journalism's in-group when compared and associated with the reactions to interlopers and the discourses used to maintain in-group/out-group dynamics (Eldridge, 2014, p.13).

Conboy and Eldridge (2014) highlight the responsibilities emerging from the opportunities and the challenges with the delivery of new technologies to journalism. The key aspect of this paper briefly focuses on discovering the association among the technological innovation and role perceptions of journalism (Conboy and Eldridge, 2014, p.566). In the context of the paper, Conboy and Eldridge (2014) find that these discourses journalism defending its

societal and civic forms. In this context, the more open journalism that engages with audience contextual investigative roles as a counter narrative to external actors (Conboy and Eldridge, 2014, p.573).

Lesser and Storck's (2001) research focus on organizations develop and drew on COP. The article examines how the COP model helps to support and create organizational value, engage in sharing and learning process within organizational performance. The authors contend that the COP model offers great value organizations that can positively impact their business routine and community. This then delivers this value to the members within the workplace.

Wenger (1998) in her book argues that the theory of learning is based on the hypothesis of member engagement in social practice and the social world. This book provides an analytical framework for this research project, specifically by applying the COP model to the field of media and the newsroom. In accordance with this model, the researcher highlights many key words surrounding the COP concept, particularly in order to develop and build the research structure around COP in the newsroom.

3.13.1 Challenges in applying COP model

This section reviews and discusses some of the criticisms of the COP and Wenger's approach. In their useful analysis of the COP approach Bueger and Gadinger (2014) showed that there are two lines of criticism regarding the model. The first criticism focuses on the meaningful application of the COP model, in particular on defining a group of people that involves and engages in the same everyday practices (Bueger and Gadinger, 2014, p.35). The second aspect of criticisms the model was identified by Bueger and Gadinger (2014) is regarding the hierarchies and policing mechanisms in the context of the COP model.

The challenge of applying the model is detail within (section, 3.12.2) dealing with issues of power is a consistent critique and there is an argument that Wenger's model has ignored this element in the context of organization of community. This side of Wenger's model has been emphasised by many authors,

for instance, Fox (2000), who referred to the COP model as not addressing unequal relations of power (Fox, 2000, p.857). Also, Mork et al. (2010), specifically looked at the power relation within the COP's model and attempted to answer the research question of 'how practices perform power effects' (Mork et al., 2010, p.576). Further, Marshall and Rollinson (2004) argued the significance of the power and politics within the procedures of negotiation of meaning, especially in dealing with the 'challenge and possibilities of attempting to integrate theories of power and knowledge' (Marshall and Rollinson, 2004, p.84). Also, Coutu and Willmott (2003) discussed the power in relation to the learning theory. In addition, Cox (2005) has argued that the 'group based on a practice not a locality', also, 'unexpected in being located in the workplace, often even in mundane work, a context which is generally seen as simply alienating' (Cox, 2005, p.13).

Critics have also argued about the idea of virtual COP and the tools of communication between the members. In this context, the most essential aspect of the virtual community is the lack of direct sharing knowledge and culture between the members' community. But it has been argued that 'this is not a major problem for experienced professionals because they have other means for exchanging cultural knowledge and have already internalized cultural knowledge as they gained real world experience' (Hara, 2008, p.104). Hence, this may be more of a problem for the new practitioners especially those who have not yet obtained more in-depth information, experience and knowledge regarding their practice and professional identity (Hara, 2008, p.104).

Other the literature has provided positive views surrounding the use COP as a model to analyse the circumstance within organizations (Kerno Jr, 2008). Also, Pemberton et al. (2007) argued that the COP has developed within the context of the organizations; these are normally down to the motivation of the individual or group of individuals; this form of the community is not an outcome of the management involvement, but this aspect exists outside of the formal organization's structure (Pemberton et al., 2007).

3.13.2 applying and Limitation of the COP

It is important to note that the COP model focuses on those features that create effective themes. There are many challenges, barriers and limitations that face organizations when they apply the COP in the context of their network practices. This section will review ways in which the model has been used to examine failures of the COP in a physical co-place and in virtual community.

3.13.2.1 Limitation of the Community of Practice (physical – co-located)

There are many researchers and authors that have identified particular limitations, barriers and challenges of the COPs (e.g. Gannon-Leary and Fontainha, 2007; Kerno Jr, 2008; Bozarth, 2008). In this manner, Coakes (2005) argued that the organization should establish a conceptualised frame that includes: applying the key aspects of the COP as an autonomous communities area. This provides the community network with many elements to conduct more interaction, mutual engagement between members, faster innovation and accelerated procedure of the introduction of innovative ideas within the organization's network and then develop the community (Coakes, 2005). Hence, in order to establish a successful COP, it requires more participants that have a high level of experience, work skills and knowledge in their practices. In order to support this notion within the COP model, Lave and Wenger (1991) argued that 'a successful COP is partially characterised by the capacity within it for more experienced participants to assist in the development of knowledge among less experienced participants' (Stacey, 2009, p.137). Thus, the main characteristics of applying the concepts of COP within the workplace, helps and encourages the community members' to develop, progress and create a successful community. In this context, Smith et al. (2005) claimed 'within a community of practice that is most well established and whose normal form of interaction is face-to-face. Also, the discussion and negotiation that was conducted between the participants is more like a personal environment in which members felt most comfortable and had more space to effectively discuss (Smith et al., 2005, p.6). This internal side of the community provides great benefits in order to have a firm ability to coordinate across autonomous,

specifically the positive influence of the procedure of exchanging the knowledge and information that flow into the community network (Coakes, 2005).

Another key limitation of the COP is the time it takes to develop and form the activities and practices. In this manner, Kerno Jr (2008), argued that the 'first challenge for conforming communities of practice is the availability of time in which to engage in the activities that are necessary for them to be effective' (Kerno Jr, 2008, p.73). From this viewpoint, Wenger (2011) provided the in-depth explanations surrounding the COP in enabling the members to be involved in collective tasks, responsibility and managing knowledge. Hence, in the community of the newsroom time is essential for the journalists to engage, exchange, be involved in the tasks and participate in the everyday news practice activity.

Probst and Borzillo (2008) in their paper provide key reasons for failings of the COP within the particular form of intra-organizational network. These reasons include many aspects of the COP model, for instance the lack of a core group; that allowed enable the practitioners actively to participate and engage in everyday tasks and activities within their network. Another reason is the level of interaction among the members in physical co-locations or virtual via automated email. In this way, the lack of interactions between journalists within the newsroom leads to creation of a low level of knowledge exchange to solve their everyday problems. Another point selected by Probst and Borzillo (2008) is the competences of the community members within the network. This includes the trust and confidence of the practitioners to conduct their everyday practice and activities, also, the lack of identification in the COP, which makes the members have a clear view and interest in their everyday life practice. Therefore, the members do not deal with their peers in the community to exchange experience and knowledge related to their practice. Moreover, practice intangibility happens when the practitioners and members fail to participate and engage with other members to conduct their work. Joint engagement allows the members to demonstrate their practice for others in order to provide to them enough understanding and visualisation of their tasks

(Probst and Borzillo, 2008). These are the many barriers, limitations and factors that make the COP fail and not develop a community.

3.13.2.2 Limitation of the virtual community

This section will discuss the limitation and barriers to effective virtual communities. The key aspect of the virtual community in the newsroom network depends on the technological tools that the journalists use to communicate and participate in the newsroom practices. The news reporter uses two types of equipment in their communication process in dealing with the peers in the newsroom network, which includes field, iPad and Satellite News Gathering (SNG) (explained in chapters 2 and 3). Hence, the key limitation of the creation of a virtual community within the newsroom network is based on the software and technology that are used for this purpose. In this manner, Coakes (2005) argues that 'virtual COP proffers an inclusive embodiment of a technology platform that aims to provide an effective mechanism for enhancing the capabilities of traditional community of practice' (Coakes, 2005, p.466).

Dochy et al. (2012) argued that 'working in virtual teams raises problems that are unusual when groups of people work in the physical place' (Dochy et al., 2012, p.73). Also, the same author has provided a practical example, which is the 'lack of nonverbal communication cues', barriers to communities' members. Further, Gannon-Leary and Fontainha (2007) argue that the key limitation and barriers in the virtual community are the discipline involved of the practitioners. Another key aspect of the barriers that face virtual teamwork members is the matter of trust, in this context the members of the team should trust others in their team to share their works and tasks in the progress of the electronic network (Dasgupta, 2005). In terms of virtual COP within newsroom practice, the news reporters are able to communicate with the workplace members but with less interaction, exchange of ideas and exchange their feedback to journalists compared with what happens in the physical co-located community. Hence, the limitation and barriers that face journalists within the virtual COP in the field are based on the capacity and establishment of the technology tools in dealing with news operations.

3.14 Conclusion

This chapter has discussed the Wenger model of the COP. Also, this chapter has considered the theoretical aspects of COP, reviewing the arguments in the context of the community of the newsroom. The researcher has attempted to present key concepts and arguments that are drawn from the structure of the community. In particular, the chapter aimed to explain and analyse the situation that surrounds journalists, such as news practice and the learning process within the framework of the COP model. This chapter also presented the term 'virtual community' in order to explain the criteria of the modern newsroom community.

The key ideas from the COP models that will be examined in the analysis (see chapter 7 and 8), and they will also be contrasted with ANT (see chapter 4 and 5) are follows: translation process and COP; problematisation and sharing of the problem; interessenment and shared network goal; enrolment and actor practice; learning process and ANT; links between ANT and COP.in the newsroom

The main aim of this chapter was to support the researcher in obtaining an understanding surrounding the journalists' news practice and importantly, the newsroom community structures. In doing this, the researcher has considered the key concepts that relate to this research project, providing a detailed understanding of the community of the newsroom and how technology, human actors and news network production shape the community.

Chapter Four: Machines in the newsroom workplace

4.1 Introduction

This chapter will examine the theoretical framework of ANT developed by Latour and colleagues, as a vital aspect of the research project. Also, the researcher will provide an exploratory method for understanding the newsroom network characteristics and situation as well as the issues relating to the journalists in their news practice. ANT will be applied to obtain an extensive understanding of the practical life of journalists in their everyday news production and newsroom operations. The research project applies the ANT as a key approach to observe, describe and analyse the actions of journalists in dealing with new technology in the news production network.

This chapter has ten sections. The first section will review the background-surrounding ANT. The second section will discuss key principle in dealing with actors. The third section will discuss the similarities between laboratory life (Latour and Woolger, 1979) and newsroom practice. The fourth section will examine the process of *translation* and key steps of this process in the newsroom network. The fifth section will examine *inscriptions* in the context of a newsroom network. The sixth section will discuss the process of stabilisation in the newsroom network. The seventh section will examine the newsroom system and the sections eight will discuss the actors' relationships in the news production network. The nine section will illustrate practical examples of applied key terms of ANT within the newsroom production network. The section ten will reviews literature and applying ANT in media. The last section will discuss the key criticisms and limitations of ANT model.

4.2 Background to Actor-Network Theory

In the previous chapter, newsroom digitisation and the COP was discussed. This chapter will examine the key concepts of ANT in order to discover new methods for describing the conditions surrounding journalists' practices within the

newsroom network. Also, this background section will provide the key concepts of ANT in the following section.

The ANT is a model developed by the sociologists Bruno Latour (1986), Michel Callon (1986) and John Law (1992) (Katsikas et al., 2005). The theory has been used as a core approach in the sociological analysis of technological innovations and scientific development (Duarte et al., 2006). It was designed to study the technical and the social aspects, as well as the technological changes; that take place in the context of an organisation (Tatnall, 2012). Latour (1991) argues that there are various complex links between the social technological elements that make up the interactions and activities of any network (Tatnall, 2014). ANT was developed to concentrate on the treatment of complex socio-technical systems and 'heterogeneous' networks (Geisler and Wickramasinghe, 2015). ANT is constructed upon the idea that organisational systems form a combination of technological and social aspects that are connected together in a 'heterogeneous' network (Salmons, 2008). Heterogeneous in this context means that the network assembly occurs between various actors, including the human beings, textual artefacts, technological tools, machines, concepts and subjects. Hence, the nature of actor relationships with others in the network derives from the nature and configuration of the heterogeneous socio-technical network (McLoughlin, 1999). Therefore, at the heart of the application of ANT is the assembly of a detailed account of the heterogeneous networks within the organisation (Seel, 2012). Through the understanding of the links and the nodes in the network, it is possible to construct an understanding of the system order in the organisation. The system order means the form of organisation between the links and nodes within the news production network and news process.

ANT is also a multidisciplinary method concerned with understanding the roles of technology tools in specific circumstances, for example, how the technological equipment facilitates, mediates or even negatively influences the activities, practices, events, behaviours, culture and tasks performed.

In this context, it provides material-semiotic tools to frame the maps of association between the human and nonhuman. This is a tool to explore the relations between natural or made 'things' or 'artefacts' (material) and concepts, ideas and understandings (semiotic). The framework of newsroom practice and interaction involve both aspects, journalists (as human actors) and their understandings and the Avid technology (as nonhuman) and its features, processes and uses. ANT provides an understanding of how the overall actor-networks are formed and the connections between the actors formed (Gobo, 2008). The use of the material-semiotic method supports the development of descriptions for the arrangement of scientific, technological, social events, actions and organisational processes in a proper order (Tatnall, 2010). The proper order means that actors are put into a systematic order to bring more stability to the network.

As noted above, the ANT is based on the notion of the human and nonhuman actors, which refers to the objects and subjects in the network. It deliberately focuses on both the social and technical aspects of the network to construct a socio-technical account. This means that ANT deals with both of these aspects of the network in equal measure. In this technique, the theory rejects the argument that purely technical or purely social relations in the network are key to explanations (Wickramasinghe et al., 2012). ANT argues that it is not possible to deal with social and technical aspects separately because the both of these aspects are involved in the processes that occur in the network and both types of actors have roles in shaping the outcome.

4.3 Key principles in dealing with actors

Dealing with the actors in the network is grounded in three key principles (Callon, 1986):

1. Agnosticism

The first principle 'means that analytical impartiality is required toward all the actors involved in the project under consideration, whether they be human and nonhuman actors' (Zhou, 2003).

2. Generalised symmetry

The second principle implies that generalised symmetry allows the researchers to gather the various types of actors into the same conceptual context of the network (Geisler and Wickramasinghe, 2015).

3. Free association

This last principle 'requires the elimination of all a priori distinction between the technological or natural and the social' (Callon, 1986).

With these principles, ANT tries to be impartial towards all actors, whether human or nonhuman, and sees them as being inseparable. This lack of any differential in methods between the social, the natural and the technological aspects is one of the defining features of ANT (Geisler and Wickramasinghe, 2015).

The term 'inscription of the network' is key to ANT. In the newsroom this idea has many different meanings to control the situation of the network and news production. In particular, controlling the news services includes the journalists' behaviours and interactions. In this way, the core aspects of inscriptions are reflected in many shapes or forms in the newsroom network, such as job description, news stylebook and newsroom policy, the Avid system and the guide to news practice in the newsroom (Tatnall, 2014). Thus, this aspect of the network makes the human and nonhuman actors more commitment to the key newsroom goals.

Callon (1986) argues that an essential aspect of the network is the commitment of regulation, which is to prohibit changing the situation of the registration process or the enrolment of actors in the network, especially when the transmission of actors that happens from the technical aspects to the social

aspects of the problem are examined. The actors' obligations to the goals of the newsroom provide the network with more stabilisation. This explanation provides a justification for dealing with the human and nonhuman actors in the same way, thinking about them in a symmetrical way within the network. This means that the actors are essential elements for building the network. They have their own views, aims, positions and roles equally with other actors and they are able to participate in the varied levels of the network translation. The translation process refers to describing the actions and things that happen in the network, for instance, in the connection between human and nonhuman actors and changing the form of this connection to another. In this way, the translation process becomes an important aspect of the harmony between the things and actions within the network (Fenwick and Edwards, 2012). These is therefore a concentration of the process of translation that happens in the network in order to determine the shape of the process of information exchange among the actors' knowledge and resources within the networked interaction (Tatnall, 2014).

Consequently, ANT provides us with many benefits as a theoretical framework for producing knowledge about the interaction between human and nonhuman actors in the network. It helps us to obtain an understanding of a number of key elements in the newsroom:

- The form of the network
- Structure of the network
- Relationships between and among actors
- Actors' interactions
- Description of the complex heterogeneous network
- Exploration of the system order

This theory enables us to highlight many fundamental aspects of the human and nonhuman actors that have roles in the newsroom network. Also, it is suitable for analysing the social and technical aspect of the news organisation network. The next section will provide in-depth information on the practical examples

provided by Latour and Woolgar (1979) and how this example is a fit for newsroom practice.

4.4 The newsroom as laboratory

This section will contrast and compare the Television newsroom hub with the context of a laboratory of scientists, one of the areas where ANT has been extensively applied. The section will provide an examination of the similarities between the scientists' laboratory and the newsroom hub as central workplaces that gather together the activities of the respective organisations. It will aim to explain and analyse the daily routine of workers activities that occur in both networks (Latour and Woolgar, 1979). Then, it will consider the scientists' practice and the journalists' practices in their work circumstances. The following examples provide us with an appropriate tool and opportunities to understand the social world and the technical aspects of the newsroom practice.

Latour and Woolgar (1979) focused on the field of sciences studies by explaining scientists' practices and activities in the laboratory at the Salk Institute. The study involved extensive observation of a bioscience laboratory that is considered the location of scientists' practices, production, relationships and the daily routine of the lab. It also explored the preparation for conferences, writing papers for projects, meeting publication deadlines, and seeking funding for research projects and as a condition of activities. The key notion of this story concentrates on the 'inscription device'.

In the context of the newsroom network, the technology tools as inscription devices support the journalist in changing an invisible item to a visible news package. In a similar way, the use of an inscription device within the workplace by scientists creates inscriptions or paper texts in the laboratory. As Latour argues, the 'inscription device, no matter what its size, nature and cost, ... provides a visual display of any sort in a scientific text' (Latour, 1987, p.68). In this context, Bruno and Woolgar (1986) believe that the laboratory as a workplace is full of inscription devices, instrument tools and intermediaries that

directly underpin network practices and are important to making the 'inscription'.

In the context of the laboratory, inscription devices are technical tools, allowing the practising of tasks that enable the display of the transformation of external material artefacts, processes or events into other media forms. For example, an inscription device (such as an Avid news cutter, an autocue or wall screen technology) provides journalists and news workers with edited, organised information and captures the story footage to create the news package as well as it put in the rundown box for checking by the news producer.

Inscription devices provide materials for other processes that are combined with transcriptions to accomplish organisational tasks, and, in the case of science, to make it ready for publication (Pickering, 1992). Once the message is inscribed or transcribed, it becomes acceptable for the scientists to broadcast this in a specialised form of the inscription, for example, science papers or conference presentation tasks for the scientists (Finn, 2009). In this regard, inscriptions have many characteristics under the terms of Latour's approach and within the framework of the social practices of actors. For example, Gravemeijer et al. (2013) argue:

- The inscription is immutably mobile – easy to be moved to another place
- Presentable – easy to be presented to others
- Readable – visible and clear to others in the network
- Inscription – able to be reproduced

The terms of inscription, transcription and translation as part of a process are key elements of ANT.

Translation is the process by which a network can be viewed as a single 'artefact' or actor or another simplified network and the process by which actors are engaged and included in the network. For example, the complex network of laboratory work can become represented as a set of process or a 'finding' in a paper. Or the laboratory may become translated into a single

representation to which attributes are linked – ‘The Biosciences Lab at the University of ...’. In the context of the newsroom network, the translation is an essential element in order to obtain an understanding of the linkage between human and nonhuman interaction, the activities of persuasion actors or the negotiation among actors to reach their goals (Teirlinck et al., 2013). Hence, it can be useful to explore the translation process in order to see the structure of a network and how heterogeneous elements of a newsroom network form a connection among themselves. In this way, there is a connection between inscription and translation; the inscription is the outcome of the translation process in the network. Both terms help us to determine the shape of the ANT approach (Tatnall, 2014).

Consequently, the activities of the network are arranged by the human actors and use the inscription devices to create the inscription items and artefacts. The procedure of inscription production in the network generates the interaction between parties in the community in order to achieve key goals, particularly between the humans and the devices. Hence, the shape of a network system is based on organisational relationships, and the interconnections of actors, interaction forms and tasks in order to produce good inscriptions.

Latour and Woolgar (1986) use the term ‘laboratory life’ to refer to the scientists’ workplace and the conduct of scientists’ activities. Similarly we can take newsroom life, the journalist’s activities and news practices as well as describe them as an essential place for news crews to inscribe their material (information and footages) to create their production in the shape of news packages. This means that the actions of journalists in the newsroom are similar to the scientists’ actions and tasks in the laboratory. In this sense, scientists’ practices are conducted by use of an inscription device in order to produce scientific text as visual documents within the environment of the laboratory. In this manner, the inscription devices in the newsroom are the Avid technology device that helps journalists to transfer a form of item to another visual material shape within the network and in the context of news production circulation.

In this meaning, the actors (human or nonhuman) have an effective role in performing tasks in the heterogeneous network in changing the form of news information into the news packages. For example, the news producer as human actor plays a big role in the operation of news production, particularly in determining the goals of the network: decision-making, creating and sharing news projects as well as making news programme. For this task, news producers are able to create a connection with more than one human or nonhuman nodes. News producers are able to manage a wide range of relationships with other human actors by using the technology system. For instance, the news producer has a relation with the news editors for sending feedback to the news correspondent via automation system. In this way, the role of the news producer focuses on the combination of various actors to make the heterogeneous news production network stable. Hence, through the activities of the human actor, they are able to shape the network and create a connection between the nodes in order to create the system and the news practices at the newsroom. The newsroom actor network is based on the association between the human (e.g. the news producer and news reporter in the field) and the nonhuman (e.g. device mediatisation to make a connection between human and nonhuman) actors. Also, the number of nodes that need to be managed is dependent on the news operation in the network. For example, preproduction could require four nodes to create the practices and system order. In the production stage, some of the nodes are removed or new nodes are added to the network, and a similar situation can be found in the postproduction stage.

In the previous section, key aspects of news production and situation surrounding the newsroom practice were discussed. Also, a comparison of aspects between both workplaces, the scientists in laboratory and the journalists in the newsroom, was discussed. The following section is devoted to analysing the key concepts of ANT in the news production network.

4.5 The newsroom network translation process

This section will discuss the process of translation and provide a detailed explanation of the translation process in the news production network. It will describe the meaning of the translation concept in the framework of the newsroom network. The translation process in the network is one of the most fundamental aspects of the ANT approach. It is key to understanding the setting of the network processes and to gaining knowledge of the relative social and technical aspects. In this way, the concept of the translation process will be considered in relation to several aspects within the network. For instance, Callon et al. (1986) notes that the translation process includes four steps or moments: *problematization*, *intéressement*, *enrolment* and *mobilisation*. In contrast, Callon points out that all of the steps do not essentially happen one by one as an orderly series in the network (Lilley et al., 2004). First, with the problematisation step, which is based more on framing the network problems, the actors that have the same interests and focal roles in the network have to be determined (Quintana et al., 2012). The next step is the *intéressement*, which deals with the actors' negotiated process to various types of interests within the network. The fundamental goals of the *intéressement* phase are the enrolment of actors to support the setting in order to accept the roles, define their interests and bring stability to the network (Tatnall, 2014). The enrolment is a process by which the actors accept their role and position and put in order their interests within the network. The last step of translation is mobilisation. In this stage, the focal actor attempts to ensure that the actors enrol in the network and, also, that there is continuity for the focal actor in supporting the actors to agree with key goals in network in order to create stability. Furthermore, during the translation process, the focal actors in the newsroom network try to impose themselves on other actors. Also, the focal actors impose the definition of their status on the other actors that are involved in that definition (Lilley et al., 2004). It is essential to note that the human and non-human actors, such as the focal actors in the network, play a vital role in convincing other actors to conduct their actions. An example of a focal actor is a news producer. They attempt to

get other human actors to accept key goals within the newsroom network. This means that the translation process and concept are related to the network construction actions where the actors attempt to exchange or transform the codes, for instance the ideas, information and news times into another things or shapes. This procedure conducted by translating or associating with a wide range of human or nonhuman actors in the network. Latour and Callon argue that the phenomena in the social world are co-produced in combination with the human and nonhuman actors (Fuglsang, 2008).

As Callon et al. (1986) state, the translation process is ‘the methods by which an actor enrolls others’. Also, Callon et al. (1986) explore the actors’ ways of engaging in the process of production and innovation practices in the newsroom network. For instance, first of all, the methods include defining the role of actors, the allocation or distribution of actors in order to create a plan, and organising their scenario of action. Secondly, the strategy of the actor and their circumstances means the focal actor can make others do things in the network by creating a space of Obligatory Passage Points (OPP) (a more detailed explanation of this is provided in the next section). Third, the focal actors struggle to impose on other actors the need to practise key goals in the network (Callon et al., 1986).

Hence, it is clear that the actor network is a result of an arrangement of a variety of types of actor interests within the network so as to create the systemic structure of the network. This arrangement is based upon the process of enrolling a variety of human and nonhuman actors in the network. Also, the ANT approach provides us with adequate tools to know and describe the role of actors in their creation process and actions. In this thesis, it will be useful to know more about the actors attempting to adapt to their new goals to participate with other actors, which are set up by the focal actors (Löwer, 2006). In particular, at the first moment of the translation process, the focal actors attempt to define and represent the network goals and actors’ interests and organise the structure of the network (Turner, 2011). In this manner, the actors are able to create their new relations with other actors, which are based

on the key goals and the positions of actors in the newsroom network. Also, the situation regarding the translation process is based on a successful connection between the actors to provide and feed more stability into the network (Hammoudi, 2014).

This achievement is a consequence of the translation process and a combination of different mediations of technology and human actors in the network, that is, the influence between the social and technical factors relative to the nature network. In this way, the purpose of the ANT is to obtain an understanding of the structure of the network, the connection among various actors and how they negotiate with each other in their circumstances (Fawcett et al., 2010). Within the actor network, the actor's interests will change according to the key actor's decisions.

The order of relations in the network includes the individual workers, technical workers, work groups, organisations and technology tools that are related to conducting an action in order to achieve their key goals in the network (McLoughlin, 1999). As Latour noted:

'A good ANT account is a narrative or a description or a proposition where all the actors do something and don't just sit there. Instead of simply transporting effects without transforming them, each of the points in the text may become a bifurcation, an event, or the origin of a new translation. As soon as actors are treated not as intermediaries but as mediators, they render the movement of the social visible to the reader.'

(Latour, 2005, p.128)

The translation process has been used by Latour to refer to the process of mediation around the interpretation of goals, expressed in the languages of different intermediaries that participate in the news project or the process of innovation in the newsroom network. Also, it is not necessary for the intermediaries at the first step to have the same interests or viewpoints of the focal actor in the newsroom network. In this way, the translation process indicates strategies that allow the possibility to change the goals and improve,

ensuring the involvement of the intermediaries in the network as well as continuation to participate in the news project within the newsroom network (St-Pierre et al., 2007). Through the translation process, they are able to explore the structure of the network; for instance, technology tools like Avid mediate the newsroom practices, communication between actors and action procedures within the network. The following sections describe the steps of the translation process.

4.5.1 Problematisation

Before jumping to key discussions surrounding the term ‘problematisation’, this thesis will provide a brief definition and description of the concept in relation to the network. The term problematisation refers to the process of defining the ‘problem’ or task to be solved. It therefore describes the alliance system or standard that gathers partnership, associations or unions within the network. The actors make an attempt at ‘defining the identity, obtaining the requirement and what they want’ within the network (Peterson, 2013). This phase focuses on defining the nature of the problems by providing a chance for the actors to determine methods to solutions and suggest suitable notions in order to act as the OPP in the network (Tatnall, 2014). Also, the procedure is about how actors become indispensable and where the actors sit in the network. This procedure is therefore related to the identities of the actors, the connection and the OPP in the network (Turner, 2011).

Problematisation is one of the most essential moments of the translation process, and it has a big impact on determining the strategies for the next intéressement stage (Tatnall, 2012). In particular, in this step, the actors know about their identity in the actor-network and attempt to generate a solution for the problem at hand. Furthermore, the actor is able to build themselves up into an OPP in their network. For example, the OPP in the newsroom maintains similar positions to the news producer (media worker gatekeeper) in the workplace or the news director in the control room, who is responsible for monitoring all processes of the news network production.

The focal actor defines the actor's interests and goals in order to persuade other actors to accept the roles that have been previously defined in the network (Seel, 2012). Thus means that the focal actor attempts to complete the forming of the network by providing more opportunities to the actors in the newsroom in order for them to accept the key goals and follow the purpose of the action. In this way, the focal actor has considerable authority for managing and organising and making decisions, and becomes responsible for conducting the successful operations of news production occurring inside the actor-network (Löwer, 2006). Through this change, the actors (as human beings) are an effective element, who are able to recognise themselves in their goals, their positions and their relationships and roles within the network (Gallon, 1999).

Many actions occur within the news network. In particular, the relationship between technology and the human actor is one that encourages more interaction and promotes a more successful relationship within the news practice network. Actors attempt to achieve their goals and gain a particular outcome from the processes of learning, exchanging experiences, sharing knowledge and collaborating in order to deal with specific problems surfacing within the newsroom. Moreover, the human actors during shared tasks, particularly with the use of new technology, are able to create an efficient interaction and exchange-relationship between human and non-human actors.

Over the time of the construction of the actor-network, the actors attempt to determine their positions, functions, interests, identities and what they want to achieve in their news practice network. In particular, the problematisation is more concentrated on the given appropriate solution to problems, specific topics and negotiations about goals, and a solution to the problem is suggested by selecting who is dealing with it or what is the request.

4.5.1.1 Obligatory Passage Points (OPPs)

The role of focal actor in the network has two main functions. These are firstly to determine the OPP as a channel of communication between the actors, and,

secondly, to represent others actor in the network by communicating in specific situations, such as solving problems (Tatnall, 2014). These functions allow actors to engage with their roles and their interests and to maintain the identity attributed to them by the focal actor. Through this step, the focal actor defines the OPP and then the actors pass by the OPP in the network.

In this manner, the construction of the actor-network is a heterogeneous system, gathering various types of actors to conduct the translation process; the translation occurs by involving different types of intermediaries, for example, human and non-human agents (Howcroft and Trauth, 2005). This aspect results in the actors defining and describing their problems and interests in order to create their projects and participate in actions within the network (Lee, 2009). This aspect of the network refers to the responsibility of the entity to define the actors and their interests within the actor-network.

4.5.2 Intéressement

This section will examine the term ‘intéressement’ and the implications of this term within the newsroom network practice. Firstly, a definition of ‘intéressement’ as the second steps in the process of translation. The second phase of translation comprises a concern for many vital processes in order to impose the identities and roles on the actors (IRMA, 2001). It is interesting that the focal actor’s task is to create stabilisation in the network by an attempt to compel the actors to accept the situation, convince them of the key goals and get them agreed by others in the network, especially with regard to their role and their identity in the newsroom network. Callon (1986) defines ‘intéressement’ as a ‘group of actions by which an entity attempts to impose and stabilise the identity of other actors it defines through its problematisation’. According to this statement then, there is no obligation for all actors to accept the key goal. Sometimes it is not necessary to continue with the goal of the focal actor within the alliance system. This means that the actors may not agree with the focal actor following their goals. The reason is that the actors may have placed their identities, aims and interests in other different projects or others tasks

(Gunawong and Gao, 2010). Journalists are not interested in joining certain news projects, sharing their tasks with other members of the network or journalists. Nor do they always have enough skills to deal with particular news stories. Consequently, the successful translation process provides the focal actors with the opportunities to replace a particular actor.

The acceptance by actors of the focal actor's goal is crucial to supporting and maintaining negotiation between the actors and allows them to practice their tasks in order to reach the goals (Geisler and Wickramasinghe, 2009). Then the allies in the newsroom production network have a role and a commitment to the regulation of the network that are linked to their aims or actions, which are based on the actor-network program (Fox, 2000). This means that there is a link between the goal of the network and the ability to deal with the network goals. Hence, whenever the actors have good relations with their goals in the network, they are able to bring more stability to the actor-network.

As Callon (1986) argues, the point of encouraging actors is to persuade them to accept the key goals that are determined by the focal actor. For example, the news producers (as focal actors) support the news crew in implementing the daily plan and practising their news tasks in an appropriate way. According to ANT, the focal actors have a central position in the framework of the actor-network, which enables the focal actor to draw on the programme of action within the network. The focal actors obtain their location in the prior problematisation stage built in the system of alliance and formed in the network (Tatnall, 2014). Therefore, the actors' associations lead to building and maintaining the alliance system, which provides more protection and stabilisation for the actor-network (Fayolle et al., 2013).

In the process of news production within the newsroom network, the actors are responsible for managing their interests that have been defined in the early stages of its development. Also, the human actors have to deal largely with technology (non-human actors) in order to achieve their goals and practice their assignments, particularly so in the digital age of practice. This creates a

massive challenge concerning the interaction between the actors, for instance, in relation to the workers, technological tools and things to conduct the translation process in the actor-networks.

4.5.3 Enrolment

The enrolment process happens directly after the success of the *intéressement* process. This means that these two processes accomplish enrolment, but only if the procedure is successful. The enrolment process starts with the actor's accepting roles, interests and positions that have been defined for them by the focal actors (Geisler and Wickramasinghe, 2009).

In this context, the actors are attempting to describe their identities in the enrolment and their participation in the community's network (Cavanagh, 2010). In contrast, if an actor disagrees with the focal actors goals, the focal actors will try to replace the actor with another in the network, one who agrees with the key goals of network. For instance, in a practical example in the newsroom, the unskilled, non-interestedness of news workers or news editors' disagreeing with the news producer about joining into some type of new practice may lead to role changes. Also, the focal actors are enrolled in order to provide a fast application of the information management system in the newsroom (Tatnall, 2014).

The enrolment phase includes many essential aspects of structuring the network, for instance, creating a plan, strategies of action, definitions of the roles, and positions of actors in the network. Consequently, the focal actors like news producers, attempt to enrol other actors (for example, editors) in order to obtain the outcome of their practice, which includes producing news packages in preferable forms. Hence, the key function of the focal actors is to support, encourage and help other actors to join the news project and abide by the main goals of the network.

Through the process of enrolment, the network focuses more on determining the engagement of technology and non-technology in the structure of the alliance system in the correct order and organisation. Also, this aspect happens

by a series of negotiation processes in order to arrange and in order to redefine the allies. Hence, the group of actors attempt to impose the identities, definitions and roles on other actors in the network (IRMA, 2001).

There are many devices used in the process of *interressement*. However, this does not create the alliance system. Furthermore, the process of enrolment needs the capability of the actors in order to control problems and obstacles in the network. Also, this aspect allows the actors to be able to achieve their goals and intended findings in a variety of ways, for example, persuading, negotiating in dealing with them, imposing a given situation and agreeing without any conversation (Peterson, 2013). This aspect has often occurred among the news crew when seeking to complete the news production process in the newsroom network.

In the process of news production and the newsroom's network, the enrolment of actors is central in the initial stages of building the network form, in particular, by accepting the network goals, agreement as well as the identity of the actors, their positions and their roles in the newsroom. The actors also attempt to construct their relationships with other actors by using new technology, by joining other news projects and by embracing a sense of belonging in the network. Hence, the actors try to translate and change their forms in the network by supporting other actors in obtaining knowledge, experience and ideas about their project as well as information to develop their news practice.

This procedure provides the network stability and allows the rapid implementation of the action programme. Through this alliance system, the journalists are enrolled, others try to enrol and others may not enrol in the network (Dwivedi et al. 2012). Thus, the enrolment of actors enables them to organise and create the connections among other actors within the network.

4.5.4 Mobilisation

The final step of the translation processes in the network is the mobilisation of allies or actors. Through the mobilisation process 'some of the actors would be used as new initiators and become delegates or spokesperson for focal actors. This leads to the network becoming more stable and stronger'(Tatnall, 2010, p.240). The intent of mobilisation is to change and conduct the translation process to organise the allies within the network, for example, the changes that happen with the position of the actor in becoming a spokesperson to represent the focal actor in the newsroom network. In this way, successful mobilisation provides the network with more enrolment of actors in the action programme and more interaction between the actors in dealing with the newsroom system. In this context, the role of the spokesperson is to become a representative and act for other actors in the network (Oswell, 2013).

In this step, the focal actors are operating to ensure they keep the actors inside the network. Also, the focal actors are struggling to maintain continuity to provide the enrolled actors with more stability in their network. Therefore, actors are practising their daily lives in order to achieve the key aims that are established according to the information system and the fundamental regulations within the community of the newsroom network (Onsrud, 2007).

The news producer is known as a delegate, and he plays a big role and has considerable responsibilities in the news production network. As Callon states, the spokes person actors in the network modify the actor enrolment into action, which provides more stability to the network. The focal actor attempts to provide actors with a new understanding within the newsroom environment. Through this, for example the news crew accept and agree to follow the news producer as a delegate in their community of the news production network.

4.6 Inscriptions in the newsroom network

This section presents a discussion of the term 'inscription', which is a key aspect of the translation and is defined as a vital part of ANT. The translation is the

main operation for re-explanation and representing the interests of actors within the network. The inscription can be defined as the translation of the actor interests in the network into material forms, which include change, design, formulation, alignment and usage of the material artefacts (Kimppa et al., 2014).

In this meaning Latour (1997) referred to how the 'inscription is the act, or process, which actors perform on other actors, shaping their attitude and properties. The properties and attributes of any actors (or network) are a result of a complex inscription process by human and nonhuman actors. Human actors are able to inscribe onto nonhuman actors (Tatnall, 2014, p.26). The inscription process is the consequence of the translation process, and there are strong connections between these two processes in the ANT approach (Tatnall, 2014).

In this context, the actors enable the accompaniment of their interests with indispensable actors in the newsroom network so as to create a possible situation for the translation process in the network. This inscription is used as a term to describe the process of making the technical artefacts, which guarantees the safekeeping of the actors' interests in the network (Seel, 2012).

The core aspect of the inscription is contained in the programme of tasks, practices and action, which are available to the workers or users in the workplace. This action program allows for the determining of the roles that are played by actors in dealing with the systems for information management (as a non-human actor) (McMaster et al., 2007). The notion of a heterogeneous network in the newsroom includes many elements that are sources of material for the inscription, for example, the skills of the journalists, news practices, organisational regulations and news texts as artefacts (Bomze, 1997). Additionally, the news items include many things that refer to technical items, such as news texts, news items, news packages, news reports, news stylebooks, video, audio, news documents, maps and news information graphics (Rhodes, 2009).

The actors in the newsroom network are able to obtain different types of interpretations for similar inscriptions in the different approaches. This is based on their news practices and their activities as news operator inside the newsroom network (Darses et al., 2004). The inscription process concentrates more on the approaches, such as creating more stability or durability in the network and inscribing something that needs to make an impact by a particular approach, for example the inscribing of scripts in technology tools artefacts (Williams et al., 2013). In the newsroom environment, the actor has a variety of interests, especially regarding change in the network.

The concept of inscription sets up several interesting questions, such as: What is inscribed in the newsroom? Which expectations of use are imagined? How are these expectations inscribed? What is the material for the inscriptions in the newsroom? Which actor inscribes them? (McMaster et al., 2007). Hence, the technology tools enable actors to engage in re-interpretation and translation as new approaches. The interest of the actor must be organised and aligned in a good way in order to deal with technology tools effectively (Darses et al., 2004).

The notion of inscription processes focuses more on the artefacts as a programme for action in the network. Also, during these activities, the actors are able to reach their aims within the network (Löwer, 2006). Furthermore, the inscription process describes how the network creates the technical objects or artefacts through software or a programme of work such as Avid news in the contemporary newsroom. This program (Avid news technology) is largely significant and has helped to create a connection among a variety of actors in the community network, especially in the framework of social roles and undertaking aspects (Kajan, 2011).

4.7 Stabilisation of the newsroom network

In the context of ANT, there are three essential stages of actor network dynamics. These are the translation, inscription and stabilisation. In the translation stage, we find the organisation of a variety of goals and actor interests within the network. The inscription step deals with the network,

creating material outcomes. The last step is the stabilisation and long-term development of the network (Löwer, 2006).

This first section will focus on the notion of stabilisation, which is based on the collective process of actors and allies' enrolment in the network. The stabilised actors agree with the focal actors goals in order to join particular processes of shared views, thinking, actions and practices, as well as to protect the network (Katsikas et al., 2005). In this step, the focal actor attempts to create an approach in which all the actors have their spokes-actors or representatives in the network, and whose work depends on the regulation of the network or network goals (Gunawong and Gao, 2010). In this perspective, the stabilisation of the network depends on the relationship between actors in the hybrid network.

Stabilisation is an essential element in constructing, improving and coordinating the connections among the variety of actors, in order to ensure stability of network. It is significant to look at the stability and social system as two elements of the network structure. Accordingly, these aspects support the negotiation of the social process in the network, particularly for the alignment of actors' interests and their goals (Hanseth and Monteiro, 1998). This means that the stabilisation process is the result of interaction, negotiation, conflicts and agonistic struggle among the actors of the heterogeneous actor-networks in the newsroom network production, which leads to maintaining the social order and system of organise the acts of network.

Thus, the successful implementation of stabilisation in the network is fundamental, especially in reaction to network alignment and organisation of their interests. In this way, the term of network stabilisation is the key element for resolving and sorting out the problems in the network, which encourage the actors to follow the goal and regulations of network determined by the focal actor. In this phase the network becomes more stabilised over time and more interaction among the actors occur (human and non-human)(Geisler and Wickramasinghe, 2009). Accordingly, through the stabilisation and

mobilisation, the actors become part of a solution for their problems become widely accepted in their network. The actors being considered as indispensable actors attempt to obtain more benefits from the stable situation of the network.

The stability of actor-network is a key aspect in establishing good connections between different actors. However, there may be actors who do not follow the goals of the focal actor and have their own aims in the network. This means the some actors are anti-programme and against the networks aims. These actors nurture their own goals and their interests, which makes the network unstable (Löwer, 2006). A solution to this problem called upon by the focal actors in order to maintain stability within the network. In particular, the news producer as focal actor is able to provide instructions for other actors that work as anti-programme of network, for example, giving notes on daily discussion board, reminding actors to follow the main goals, agreeing to a schedule, and organising daily meeting for resolving the problem. If the news producer is not satisfied with the result he should think about another way to resolve conflicts.

4.8 Information management system in newsroom (Avid technology)

Recent developments in the newsroom's field have heightened the need for better understanding surrounding the new situation and use new technology. The new communication system has been adopted and incorporated significantly across television newsrooms and news production teams. The news system aims to create new and more efficient environment of news delivery and news broadcasting. One of the most popular software tools is the Avid technology. A key aspect of newsroom automation consists of many sub-technology systems that connect together in one form and in the same network (CSI Magazine, 2009). Through this system, the journalists are able to obtain their tasks update. Then, the human actors are able to control their connection with other actors, perform their work and thus spend less effort working on their panel desk. In this way, the journalists in the newsroom have commitment to the regulation of the network, especially the system structure. The automated workplace system have many aspects to shaping behaviour of the users. This

feature are based on the requirements of the automation system, for example, to determine writing a limited number of words in a news item or to determine the duration of news report. This makes the news editors or news reporter obligation them to work, as the system requires. This is example of “how the social and technical factors influence the service network interactions” in the newsroom network (Tatnall, p133, 2014).

The automation system in the newsroom has an impact on the shaping of news practice, skills and development of the capacity of news production. Through this network the newsroom’s journalists as the human actors are able to coordinate their relationships with other actors involved in the news production directly. Also, the focal actors are able to use the automation system to manage, organise and monitor all operations in the newsroom. The system is crucial to simplifying the news process and managing the actor-network. In particular, the system helps by improving relationships between the actors and connecting them to communal or shared key goals within the network. Through this automation tool, the focal actor as news gatekeeper is able to replace the actor human and non-human actors where is possible and when against the key goals of the actor-network (Keirstead, 2004). Hence, this element facilitates the operation in the network by making it easier and more flexible to deal with heterogeneous network of actors that are involved in the processes of news production.

The newsroom system or standardisation of the newsroom network has an impact on the actors, especially in following the programme of action and following the key goals in the network. This aspect in the newsroom acts like a framework to organise and coordinate the practice of actors within the workplace. Hence, the creation of the standards of work in the newsroom is a useful aspect to reach the core aims of the community.

4.9 Actors’ relationship in the newsroom network

The relations are one of the most vital and central aspects in the social network (Monge and Contractor, 2003). The perspective of the ANT is to concentrate on

the structure of the mutual relationship that is supported by the human and nonhuman actors in the network (Henderson, 1998). The newsroom network production is established as a heterogeneous network, which is an association among many elements of the human and nonhuman actors. The core principle of the ANT is that the human aspect is located in the context of the wider network of non-humans. Also, the ANT approach refers to the construction of the relationship between humans and nonhumans in both forms of the semantic and the material (Taylor and Signal, 2011).

In 1990, Latour demonstrated that the network relationships are like chains of collective connections among human and nonhuman elements, for example, the forms of the relationship in the network includes (human and human), (human and nonhuman) and (nonhuman and nonhuman). The newsroom technologies tools (as nonhuman) are engaged in the news practices and social practice, in which actors' struggles to achieve their goals. In this way, there are better connections between people with other nonhuman actors, for example artefacts, documents, tools and computers within the newsroom network. In the general structure of the network, it is important to understand how the relationship is built within the larger network, among different type of actors. The networks of 'humans and things are not all the same nodes, some of the nodes are human, some of them are concepts and some of them are artefacts' (Monge et al., 2010). In order to develop the newsroom network, the relationships requirement is to construct this aspect more cautiously and flexibly between the combination of the heterogeneity of the human actors, objects, concepts, technology, actions and artefacts (Fenwick and Edwards, 2012).

The actors that are members in the network are directly engaged in the activity and action within the network, which has a great impact on the shape of the relationships (Paterson and Domingo, 2008). This means that each actor (human and nonhuman) plays a great role to shape the form of the network. Also, the ANT of Latour considers the technology tools that have a great role to

reconstruct the network, not like a procedure or like a principles setting, but like a culture (Lee, 2013).

The ANT is a proposal of a new method to deal with the relationships among the technological tools and social life in the network. The ANT is more concentrated on the mutual relationship among technology and non-technology aspects in the network. Hence, the new technology such as the new system of newsroom 'standards' have a great role to shape, assemble and build the form of relationship among the heterogeneous actors in the network. Furthermore, the newsroom standard provides new program, strategies and ways for the journalists to conduct their actions. This means that the standards or the protocol of communication have a great role in organising and creating the relationship among the actors in the network. Also, the newsroom standard describes the characteristic of new technological tools for use and for way of the operational change that are connected with the processes of the technological application.

The developments of the concept of ANT have an important connection with understanding the relational operation and the construction of the relationships of power in the organisations network. This method is a way of discovering the ordination of relationships among the technology and non-technology practices in the newsroom, for example artefacts, objects, language of discussion, news texts, social order, and newsroom culture practice (McLoughlin, et al., 2000). In the newsroom practice network there are a variety of relationships, the key relationship is between the humans and the events. For example, the reporter relationships in the field include the connection with the events, news, resources and technology tools. Also, the reporters in the field have relationships with humans such the members of crew, resource of information, eyewitness, interviewees and people who are involved in the news item. Thus, the reporter has both type of relationship in the field of newsgathering with the human and nonhuman actors. Also, the key goal of the reporter is to construct relationships in the field in order to inscribe and create news packages. The competition, challenges and goals of the human and nonhuman actors have an

impact on the type of relationships, and period of relationships in the social network.

However, the situation is different in the global network or macro network, which has huge numbers of the nodes and connections together (Contractor et al., 2010). Hence, in this condition, the community and social network of newsroom have the virtual link between the field of reporter and the newsroom, because they use technology tools to make the connection between both work places.

4.10 Illustrating practical examples of the key terms in the newsroom

This illustrative example based on the example innovation of the European hotels described by Law and Latour. The innovation example include ‘attaching large cumbersome weights to room keys in order to remind customers that they should leave their key at the front desk every time they leave the hotel instead of taking it along on a tour of the city’ (Law and Latour, 1991, p104). The grammatical imperative acts “‘inscribes on a sign’ as a first load “leave your key room at the reception”. The inscription on the sign is a second load; the polite word ‘please’ the third the mass of the metal weight adds.

In this section will re-explain the innovation of the hotel in the newsroom practice. In previous section was discussed the situation surrounding the role of the news producer as an example of the focal actors in the network. In this situation the key human actor in the newsroom is the news producer which attempts to inscribed the sign in order to shape the behaviour of news practices and in order to follow the key goals of the network.

The news producer presents themselves as OPP to the journalists and news crew in the newsroom network. In this way, the news producer as manager and as OPP is looking to solve the problems that face the news crew. Here the news manager attempts to avoid mistakes or technical problems because it is costly, impacts the quality of news production and requires a lot of time to solve.

In this position the news producer querying, investigating, are looking after to the journalists activities, via the newsroom networks standards. The news producers job in the network focuses more on checking the work of news crew by provide them information, instruction, and discussing with them how to follow the key goals of the daily plan. They seek to maintain the news producer has to deal with the network and make them commit to work as draw in the daily plan.

However, the journalist may follow the news producers' goals within the network. In this situation the goals of journalists are not aligned with the network interests. This makes an un-stabilised network where actors disagree with the key goals of the network. In terms of inscription, the news producer is unable to imagine the behaviour of journalists in the newsroom. It does not fit network regulation, and how they should deal with the news practices and use technology to their production. The inscription in this situation is manifest in, the way of news producer to communicate their news crew and provide them the instruction at the time of work or morning conference, this is design to keep the journalists in same position and agree with the key goals of network, in order to follow the OPP or news producer aims.

The stabilisation of newsroom network results from the following and agreeing of journalists to the news producer goals. However, If the journalists follow their own goals and make an 'anti-program' (Löwer, 2006) of newsroom action, news producer try to replace the actor with anther that agrees with the key goal, or by providing notes or instructions that seek to change their behaviours and to follow the news producer and the way that selected by the OPP.

For example, the imperative instruction or statement for the journalists, sometimes inscribed as instructions on the newsroom billboard, or the deskwork of journalists or in oral form in the daily newsroom conference. The key aim of this instruction is to organise the journalist's behaviors according to the main goals of the speaker person (news producers) and the newsroom network. For example, the news producer instruction to uses terms in the news context that is based on the language stylebook and news practice guide in the newsroom.

These are example of the methods that make the journalists follow the instruction of news producers' goals and organise their relationships so as to keep to the goal of the newsroom network. When the inscription, signpost, the moral obligation, principle of network is failed, the news producer has to think about other ways to tackle the problems. In another words, the OPP try to find successful ways to solve the problem of follower behavior (Latour 1991).

During The translation process in the newsroom, the news producer wants to fix and improve the situation. For example through:

- First in the news conference at morning time provide them information to work as regulation of the newsroom network.
- Second, Individual instruction face-to-face or using message feedback theory the Avid technology or announce to group discussion.
- Third, Written paper putting on the newsroom table or tasks board, the news producer use different way to convince the journalists to doing their tasks in good way. Reminding the journalists to work as plan and goals that select for them in early time of day work.
- Further, use the discussion board on the Avid technology to send message for them.

After this implementation of the news producer plan and the inscription of the instruction, the news producers expect that the majority of journalists will follow the instruction and the network rule; the news producer inscribes the action program. Please follow the instruction of the network by using the book let or language guide of news practice. This way is more powerful than using oral instruction, to tell the journalists acting in this way.

After applying all the methods to control the situation by the OPP or news producers. The newsroom network will be more stable. The stabilisation of network is a result of journalists following the instruction their actor-network.

If the news producer is still not happy with the result of using different methods to control the journalists and they have to think about other ways to deal with situation and find new method to talk to the journalists. Again the news

producer enrolls new actors “journalists” in the network of newsroom. For example, create new news projects share by involving new members of the newsroom instead of the old members within the network.

This way of dealing with the journalists has the potential to improve their skills conducting their practice and impact the quality of news item in the newsroom. However, it has a high movability by disagreement with the instruction of the news producer. This means that the actors sometimes implement the program of action and the actors not follow the key goals of the network.

The stabilisation is through the step of the news producer attending to all instruction on the daily bill-board task or by using the discussion board of the Avid technology. The news producer was able to align the journalist’s goals (the actor follow the news producer instruction to conduct their practice), then with the journalists goals(feeling comfortable when they follow the goals of network under consideration of the news producer). Now the most of journalist are acting in conformance with the goals of the actor-network under consideration of the news producer and OPP.

The news producer has managed to create stability for the newsroom network by the inscription of the action program into new actor, with instruction on the daily board. The news producer satisfied with the resulting journalists behaviour. The news producers close the black box of key problem that face the journalists in the network and turn to deal with other tasks and problems. The change in the journalist’s behaviour occurred by struggle of the news producer and a required a considerable amount of instruction to them. However, if this fails it would force the news producer to re-open it again and think again about new way to find solution to another situation in the newsroom network.

4.11 The Actor-Network Theory and media

This section will review the literature relevant to ANT when applied to the field of communication and media. At the step of this project ANT to analyse the situation of news practice in the field of the newsroom and media.

Couldry (2008) is one of the scholars who argued more that ANT theory has had a high impact on the social sciences, providing an explanation for the social order across networks of connections between human and nonhuman agents and technologies and subjects. He attempts to explain ANT, which seems perfectly placed to provide an understanding of the role(s) of media and communication technologies in contemporary society. Also, Couldry (2008) agrees that ANT can provide an ethnographic analysis of the mediated process within networks (Couldry, 2008). In his discussions, Couldry (2008) has pointed out that ANT, when employed for empirical research, provides many benefits for the media scholar.

Anderson and Kreiss (2013), in a field ethnography research, examined how the ANT enables the researcher to understand the connections, which shape the socio-technical actors within political and journalistic practice. The researchers concentrated on the black-boxes in order to investigate specifically two distinct styles of work that the electoral map performs in stabilising the political network, especially representation and making new capacities to act. Also, the findings illustrated the value of the ANT approach in the analysis and methodology of ethnographic research (Anderson and Kreiss, 2013).

Plesner (2009) examined the ANT as a framework to explain and analyse the connection between new information and communication technology in work practice change. Plesner argued that ANT provides a new viewpoint on the holistic research of mass mediation practices. This article offers knowledge related to the heterogeneous actors in the network including human and nonhuman. The paper describes related to the impact of communication tools on changing the work practice, especially in terms of production speed and informality. Also, the author provides an explanation regarding the change of relationships between the people within the network (Plesner, 2009).

Micó et al. (2013) discussed the development of newsrooms, especially there technological convergence. This paper offers the longitudinal view of convergence particularly in providing an explanation related to the shape of the newsroom network and provides the examination of power relationships as

well as internal communication within the media corporation network. This work focuses on an analysis of the discussion of the journalists and interviews the convergence within the newsroom network and relationships between the newsroom actors. Through the ANT approach the researcher follows the actors within the network and provides an explanation surrounding continuity and change. Micó et al. provide in-depth understanding related to the diffusion of the innovation in the newsroom network, especially in relation to the convergence, organisational structure and the evolution process.

Van Loon (2007) addressed the processes of mediation that shape the live experience of technological change and development. In particular Van Loon focused on the old and new media in order to demonstrate how media shaped our imaginations and perceptions. Also, the two main ideas of Van Loon (2007) argued for the use of ANT analysing media technologies in order to obtain better understanding of the contingent elements impacting their emergence, development and application. Van Loon (2007) also emphasised how the media technologies have played an essential role in the (re-) configuration of the social and cultural practices and the formations.

Austrin and Farnsworth (2005) applied ANT new media phenomenon of network mediated poker playing and the actor-network re-established in terms of media studies. It addresses the changes in the new technology as they apply to social world and Internet poker playing. Austrin and Farnsworth (2005) argue that ANT provides a meaningful contribution to the analysis of media and technology.

Recent research using ANT has shown that the theory provides an observed and explores the digital newsroom network (Hemmingway, 2007). In order to examines the changes in the new media and journalists' practice. Hemmingway attempts to provide an in-depth explanation surrounding the practical world of news production processes and technological use in this field. The paper argues that ANT helps the researcher to conduct an extensive interpretation of news media practice. Accordingly, the use of ANT in the context of the present research is a practical way to examine the situation of newsroom practice and

journalists who deal with new technology tools for newsroom network production.

In accordance with the argument presented by Turner (2005), the main topic has focused on new technology and the boundaries of journalistic practice in the field of media. Turner (2005) believes that ANT provides a powerful method for analysing the changes in new technology and the situation regarding journalistic practice in the field of media. Also, Turner (2005) contends that ANT provides a unique language for determining the new type of actors, networks, programmes and processes emerging in the field of media and journalism.

4.12 Criticisms of the Actor-Network Theory

This section will discuss and review the key critical aspects surrounding the ANT. There are three key limitations of the ANT model; (1) it does not address political power; (2) to some criticise be lack of distinction between social and technical actors; (3) it does not address the subjective relation between human actors. This model has been criticised from many perspective. In this way, Latour (2005) himself has responded briefly to the practices power aspects of the criticisms and complaints as follows:

‘...Actor network theory has been accused of two symmetric and contradictory sins. The first is that it extends politics everywhere, including the inner sanctum of science and technology; the second is that it is so indifferent to inequalities and power struggles that it offers no critical leverage being content only to connive with those in power’.

(Latour, 2005, p.251)

Additionally, there are many scholars who have criticised the ANT model in a particular way in dealing with micro and macro levels. In this context, Avgerou (2002) argued that a few studies related to the actor-network have illustrated this possibility in a convincing method, during the focus on the detailed aspect

of the micro-level translation (Avgerou, 2002). Furthermore, the same author discussed that the 'concentration on the details of an actor network with little attention to the border of social structure and processes within a network translation unfolds is one of the major criticisms of actor network theory more generally' (Avgerou, 2002, p.64).

With regard to the socio-technical distinction the criticism deals more with the ontology of the ANT, specifically discussing the social and non-social aspects of the model. In this manner, the key argument of Bloor (1999) focuses on the symmetry postulate within the concept of ANT. In this respect Bloor (1999) argues that:

'...because Latour has picked up the wrong end of the stick it isn't surprising that his subsequent account of the symmetry postulate is confused. That postulate is not expressive of, or dependent on, an underlying asymmetry of attitude towards nature and society of the kind he alleges. A correct, naturalistic reading of the symmetry principle implies that both 'nature' (that is, non-social nature) and society will be implicated in the formation of belief. The 'symmetry' to be insisted upon is that both types of cause, both our experience of the world of things and the world of people, will be implicated in all bodies of collective belief'.

(Bloor, 1999, p.88)

Hemmingway (2007) argues that the more current criticisms surrounding the ANT have looked after to concentrate on 'its insistence on the symmetry between human and nonhuman actors within a network, and its stubborn refusal to acknowledge the human subject as discernibly different from its nonhuman counterparts' (Hemmingway, 2007, p.31).

Criticism and objections surrounding the ANT, Cresswell particularly critiques the 'ANT's radical ontological assumptions'. This criticism has led to production of essential ideas of evolution of the ways in which the actor-network is shaped and formulated, however, it basically remains a viewpoint of the world as made up of the networks in which objects can have an important role in shaping social

relations (Cresswell et al., 2010, p.3). Doolin and Lowe (2002) have also concentrated on the ontological aspect of the ANT model. This aspect of criticism has drawn on Callon (1986b) and Michael (1996) by summarising these aspects as:

‘...(1) an agnosticism or impartiality towards the nature of the actors involved in a controversy, (2) a generalized symmetry in treating human and non-human actors with the same analytic framework and vocabulary and (3) a repudiation of a priori distinctions between the social and the natural or technical’.

(Doolin and Lowe, 2002, p.73)

Additionally Lee, Law and Hassard (1999) have provided an explanation surrounding ANT and how this model provides an essential tool to understand the socio-technical relations within the network, which are based on the approval of a relativist perspective for the society nature distinction (see, Doolin and Lowe, 2002, and Hassard, Law and Lee, 1999). Also, Durepos and Mills (2012) emphasised that the explanation related to the lack of privilege that is provided to the human actors within the actor-network, the key reason for its concentration on symmetry in doing study surrounding the human and non-human actors, this aspect has received huge and substantial criticism (Durepos and Mills, 2012).

In regard to the macro-level, Howcroft et al. (2004) demonstrated in their defence of the ANT model that ‘ANT theories are sceptical about the influence of macro-level influences such as social class and markets. Williams and Edge (1996) have been criticized for descriptive work that hands over too much power to individual actors, while ignoring structural interests and power issues’ (Howcroft et al., 2004, p.352). In this context, Callon (1987) has observed that the key concept of the network does not delineate by boundaries; this aspect is extendable to deal with other entities. Hence, this aspect allows the connecting of ‘the inside and the outside of the micro and the macro’ (Avgerou, 2002, p.64).

Hemmingway (2007) argues that the key criticisms of the ANT are a great tool for the interpretation and reading of scientific action and practice within the

laboratory. In this manner the ANT model is essential to concentrate on its delegation of power to non-human actors and what was observed as its adherence to a monolithic and unrealistic sociological constructivism within the network (Hemmingway, 2007). Further, in his book, Hemmingway (2007) has referred to the weakness and criticism surrounding the ANT notion 'in a scathing attack on Latour's scientific work, they refused to contemplate any divergence from the tradition of an unproblematic division between society and nature' (Hemmingway, 2007).

The key argument of Couldry (2008) has focused on the spatial virtue that is linked to the limitations and the ANT model neglecting the time, in this way arguing that the:

'...Actor-network theory spatial virtue is connected with a limitation, which is actor-network theory neglect of time at least as a dynamic process that continues to transform networks after they have been formed at one level it is incorrect to say that actor-network theory neglects time'.

(Couldry, 2008, p.100)

In addition Couldry (2008) has argued other drawbacks and benefits of the ANT applied within media studies, especially, 'the constraints derived from limitations of ANT itself as an attempt to understand human action and practices' (Couldry, 2008, p.99). Hemmingway (2007) has stated that there are concerns among the scholars' views, which concentrate on the ANT model, in, particularly in the social and cultural academics. For instance:

'Couldry, Boyne and Law all observe the limitations of ANT to address the complex interplay of subjectivity and power between human actors within networks, and have attempted in their separate ways to widen the theoretical field so as to achieve a more refined and perhaps more adequate exploration of the role of human actors in the network'.

(Hemmingway, 2007, p.31)

The scholars look at the fact that the ANT has contributed more in a political viewpoint. In this respect Aitken and Valentine (2014) stated 'one often cited limitation of ANT as an approach, and the reason why a few scholars argue that ANT might also be seen as an political perspective' (Aitken and Valentine, 2014, p.142). In this context, Whittle and Spicer (2008) discussed that the ANT depends on conservative politics, in particular this aspect comes from the radical principle of anti-performative politics that intended at emancipatory of the social change, through the local and the small-scale (Whittle and Spicer, 2008). Spöhrer's (2016) explanation of Couldry's perspective ANT and power relations, states that the key characteristic of the ANT's value is the opportunity of analysing power relations and how power relations are established, shaped and stabilised in the long term within the network (Spöhrer, 2016). In this context, Couldry (2008) argues that the key limit of the ANT model in the field of media analysis and social science is the relative lack of interest in the long-term power effect of networks (Couldry, 2008). This point has supported by Alcadipani and Hassard (2010) who argued that there are four key criticisms of the ANT stated that:

'.... Limited analysis of the social structures', in particularly neglecting issues of political bias and morality; failing to conceptualise adequately the distinction between humans and non-humans; and has problems in examining how to follow entities in the network analysis'.

(Alcadipani and Hassard, 2010, p.420).

As well be discussed in chapter the researcher sees the COP model and ANT models providing complementary theory to address these issues.

4.14 Conclusion

This chapter is pivotal to this study as it attempts to explain and discuss the key concepts of both the sociotechnical system and ANT. In the context of this chapter the researcher has defined certain key words of the socio-technical system in order to explain the mapping of technology in the newsroom and the

shape of the newsroom network. The key topics that have been examined and discussed in the context of this chapter, such as the newsroom as laboratory, translation process in the newsroom, and the steps of this process. Following on from this the chapter defined and discussed inscription and stabilisation as two key processes occurring in the actor-network newsroom.

The key goal of this chapter was provide the researcher with a logical, detailed image of the newsroom network, and importantly, the connection between human and non-human structures. By doing this, the researcher has addressed the key areas associated with this thesis: namely understanding the role of the technology and human in determining the shape of the newsroom network, daily practices and news production.

Chapter Five: Links between COP and ANT

5.1 Introduction

This chapter will discuss and compare the key aspects of both the ANT and COP models. It will explore how both models can work together in the context of news practice and news network production. Provide in-depth discussion how ANT can work with COP. it considers how individual actors develop their knowledge and share this with other members of the network. it also examines how the actor attempts to learn how to solve his/her problems within their network or community. Other aspects include how journalists conduct their activity in order to frame their problems; how the journalists attempt to change their news practice to reach the goal of the action program; how they are able to shape their relationships with others in the network; and how the journalists become more obligatory to the rule and instruction of the news producer as an example of focal actor within their network.

It is set out in nine sections: the first section will review literature on COP and ANT in the media context. The second section examines the ANT translation process and COP learning process. The third section will examine the problematisation (ANT) and shared problems (COP) within the network. The fourth section will examine intéressement (ANT) and shared network goals (COP) between the human actors. The fifth section will examine the enrolment (in ANT) and actor practice (in COP), in particular the formation of the network and the negotiation between the journalists to reach their goals. The sixth section will focus on the mobilisation (ANT) and how the journalists understand their practice (in COP). The seventh section will discuss the learning process and ANT model, also, how these models support the process of learning between the members of network. The eight section will illustrate the overall integration ANT and COP as models of collective action within the field of newsroom practice. The final section will discuss key value of combining COP and ANT models in understanding newsroom practice.

5.2 The COP and ANT

There is a small amount of literature that combines both of the ANT and COP models in the field of media. In particular this research uses the both models to provide an explanation and analysis of the actors that are involved in the journalists tasks and practices Esnault et al. (2006), used the ANT, COP and participatory design in order to provide analysis surrounding the design context of the European project called ' PALETTE'. The key purpose of Esnault et al. (2006) work is to develop interoperable services. They argue that the using the ANT in the context of the project provides an analysis of the design of situation where the COP model helps to develop an appropriate Participatory Design methodology.

Weiss and Domingo (2010) combine both of the COP and ANT as theoretical approaches in order to analyse the innovation in online media newsrooms. The key purpose of their paper is to create a theoretical framework for analysing the situation of the journalist based on the technological tools; the social structure and the journalists practice within the newsroom. Weiss and Domingo's (2010) research, focuses on describing innovation in online newsrooms, in particularly the online production crew, practice and use of new technological equipment such as automation systems. In conclusion, Weiss and Domingo (2010) suggest that these methods are great tools in order to understand and explain the situation of the actors involved in the processes of innovation and decision-making in the newsroom as a workplace.

Fox (2000) argues that the organisational learning, ANT and COP models feed each other to contribute to our understanding in particularly, in the learning process. The key discussion of Fox (2000) draws "attention to the concept of power embedded in ANT, which he sees as having more in common with that of Foucault than Lave and Wenger"(Hughes et al. 2013,p.8). Also, both the COP and ANT models provide a better understanding of the situation of organisational learning. None of these studies have sought to systematically map the links between COP and ANT. The following section provides such a mapping.

The following sections compare key features of both ANT and COP

- Translation (ANT) and learning process (COP)
- Problematisation (ANT) and sharing of the problem (COP)
- Interessement (ANT) and sharing network goal (COP)
- Enrolment (ANT) and actor practice (COP)
- Mobilisation (ANT) and understanding practice (COP)
- The learning (COP) and Actor-Network Theory
- Links between COP and ANT models
- Value of combining COP and ANT models

5.3 The ANT translation process and COP learning process

The previous chapter highlighted key aspects of the translation process and the crucial steps of this process. Latour (1987) explained the translation concept as 'what happens when entities, human and non-human, come together and connect, changing one another to form links'(Fenwick and Edwards, 2010, p.9). This process provides the actor with ways to create the system order for the network, to organise the links, practice and shaping of the relation between them. A practical example for the situation within the newsroom community network is the actions of journalists and their ability to deal with technology tools in their workplace. Furthermore, the translation process within the newsroom activity is the procedure of "reinterpretation, representation, or appropriation of interests by an actor, so that the other actors in the network can follow them"(De Figueiredo, 2005, p.17). In this respect, in order to construct the translation procedure possible within the network, "the medium is needed where the translation is inscribed "(De Figueiredo, 2005, p.17). Hence, the key aspect of the ANT model is a social process that is used in order to obtain an intellectual context to provide an opportunity to understand all the elements that relate to the network interest and structure. In particular this is a process where the individual actor shapes the alliances and mobilises others actor within the network practice (De Figueiredo, 2005). According to Latour's (1993) argument:

'...The first set of practices, by 'translation', creates mixtures between entirely new types of beings, hybrids of nature and

culture. The second, by 'purification', creates two entirely distinct ecological zones: that of human beings on the one hand; that of nonhumans on the other'.

(Latour, 1993, p.10-11)

In this context, the community of journalists are working and practising their everyday life in a specialised discipline (Sawyer, 2005). Fenwick and Edwards (2010) continued that the translation 'during mixing of icons and written text, becomes something' (Fenwick, and Edwards, 2010, p.51). Similarly, the situation for news practice in the newsroom in this aspect includes the mixing of a variety of elements to shape the news item. For instance, the community of journalists follow online instructions (from the news producer as an example of focal actor) and convey information via the automated system within the newsroom network. This aspect shapes the journalists' behaviour within the network and their actions become established in the overall programme of action. The automation system directly supports the journalists in their collaborative practice and provides them with an opportunity to access the video library and news items in order to create their news package. Also, the action of journalists within the newsroom network includes dealing with the news item (nonhuman) and news crew (human).

We can map the ANT translation process onto the concept of the learning process of Wenger (1998). This aspect is particularly reflected in the four phases of translation process. In this respect, de Figueiredo (2005) claims, "the design of a learning context is a process of translation". He went on to state that:

'...The designers start by translating the learning objectives into a number of requirements. The requirements are then translated into a combination of activities and materials that make up the context'.

(de Figueiredo, 2005, p.18)

In this way, the COP model provides members with the ability to engage and learn with others in the community network (see, Wenger, 1998, p.86). This

means that the members of the network organise and shape their behaviour in order to be involved in the activity and practice. A good example of this is the attempt of the news producer to find solution for her/his problems with producing the news package, also to provide the news workers with information and encourage them to learn more about their practice. This aspect of the community exists in order to encourage the members to learn, obtaining experience from others and conducting more interactions with the community members. This aspect offers the members the opportunity to gather new knowledge, information and also, to recognise and share their practices within the newsroom (Coakes, 2005). De Figueiredo (2005) in his work provides a practical example surrounding the community of learners and how learning has a connection with Callon's phases that distinguish the process of translation in the network (De Figueiredo, 2005).

Latour's theory is based on the individual (human) and device (computer) called actor, such as the gunman, and is a combination between the human and nonhuman actors. Latour states that "it is neither people nor guns that kill, responsibility for action must be shared among the various actors"(Spinuzzi et al., 2015. P.6). The person is unable to do anything without the gun. In this manner, Latour maintains that:

‘.....the gun is not a passive receptacle of human motives anymore than it is the direct cause of them . It is rather that a gun being held and a person holding a gun are distinct from unarmed person and an unheld gun’.

(Spinuzzi et al., 2015. P.6)

Thus, the man needs identity, knowledge and skills to use the gun within the boundaries of everyday life. To do this, the gunman attempts to create relationships with other people, in order to obtain more experience and solve their lack of knowledge in using the gun. In reference to the newsroom environment and journalists in particular, the key aspect of improving their skills is involved in the community action and interaction with others members. They must also be engaged in the process of learning, in order to obtain their

experience. This example is like the wine taster community which Wenger's refers to: 'the professional role of the participant wine producers or journalists, they were seen to share repertoires of ways of doing things, for example verbal and nonverbal practices during the wine tasting' (Garzone and Ilie, 2007, p.307). In the context of newsroom practice, the journalist requires professional skills and knowledge to deal with technology and solve relevant problems within the network. Also, the standard of communication (automation system like Avid) in the newsroom obliges the journalists to commit to the goal of the focal actor (as an example of the news producer) and policy of the network (namely the stylebook of the news editing). Callon claims that the concept of translation means the continuity of change that occurs in the context of network:

'.... The translation emphasises the continuity of the displacements and transformations, which occur in this story: displacements of goals and interests, and also displacements of devices, human and inscriptions displacements occurred at every stage'.

(Callon, 1986, p.18).

The concept of the COP model contributes to the ANT model in many aspects within the community network.

The following section will review the key arguments for a connection between the ANT model phases and COP in order to obtain an in-depth explanation of how these two models work together.

5.4 Problematisation (ANT) and sharing of the problem (COP)

This section compares the ideas of problematisation in ANT and problem sharing in COP. It makes use of examples from approaches to highlight how joint problem identification is key of both approaches.

an ANT example is the scallops and fishermen of Callon's (1986) study. The first step for the researcher in the case of the scallops was to write a detailed report describing their observations in order to form a future plan and project.

Through this journey in the scallops project, the researcher recognised and understood how the situation was managed by the fishermen's community to protect the larvae. Hence, the researcher discovered that there was a problem in the project and tried to improve the methods of cultivating the scallops at St. Brieuc. In this way, the first action of the researcher was to devise a plan to develop techniques for dealing with the problems and define the situation of the fishermen's practice in their community.

The key questions of the researcher focused on the change of the larvae (when it occurred and how it grew). In this way, the three researchers defined their identity as an OPP in their network (Callon, 1986, p.6). The actors were thus able to recognise their problem within their network. This aspect of the network provides the actors with the knowledge to understand and describe their interests, aims and problems. The key point of the St Brieuc Bay case is that the researchers obtained understanding surrounding the problem that face the scallops and proposed some they have advice to solve this problem. The actors accepted the researchers' advice and they stand as an example of a focal actor, following the goals of others, in order to find a suitable and practical solution for their problems within the community of fishermen. As a result the researchers become the OPP in the network (Fox, 2000). Furthermore, due to the construction and creation of a form of the network by the focal actors followed by the multistage process called 'translation', the researcher described the project of the fishermen and the scallops (see Callon, 1986). Hence, the researchers through the process of translation are describing the network from their viewpoint related to the actors, in order to determine the goals and interests of the actors within their network (Kappelman, 2009).

In the newsroom it is important to describe how the problematisation phase occurs and what the key aspect of this process is within the community network. First the news producer in the newsroom network attempts to become the OPP for other journalists in the news production team. Through this role the news producer (as an example of focal actor) attempts to define the nature of news practice and share their ideas in order to find suitable solutions to the problems faced by journalists through negotiation with them within the

network (see: Callon, 1986, p.1). It was discussed in an earlier section that the actors or members of a community must have full understanding surrounding their identity, practices, action and the program of action within the network.

Accordingly, Wenger (1998) argues that the 'members actively seek to learn and share from each other' within the community network (Coakes, 2005, p. 278). In this way, the key aspect of the network is how journalists attempt to negotiate their ideas, share their problems with each other and with the news producer to find a suitable solution to their problems. Savin-Baden (2015) contends that the COP term is based more on social learning and the social activities that happen in the community, in particular, when the members have the same interests:

'...The concept of a community of practice (Lave and Wenger, 1991) refers to the process of social learning that occurs when people who have a common interest in some subject or problem collaborate over an extended period to share ideas, find solutions and build innovations'.

(Savin-Baden, 2015, p.38)

In the context of the newsroom, the journalists, as an example of human actors attempt to formulate their problems and issues with other news crewmembers by following the news producer as an example of a focal actor. For example, the news crew participate in the newsroom conference negotiation, when the news producer, news editors, graphics designer and news directors attempts to present their ideas to create the news item or news program. Through this meeting, the newsroom members determine the problem and the tools in order to find suitable solutions. Furthermore, the journalists' action comes after the idea has been shared and negotiated with other members of the community. In this manner, they conduct negotiations, and then they accept a suitable way to work together. Hence, the newsroom members accept the goals of the network and follow their news producer as an example of the focal actor in the newsroom. In this way, the key aspects of this process are determining the problems of the newsroom network, recognising acceptable solution by the news actors, and sharing ideas to solve the issues. In this context, the human

actor attempts to roles for this purpose and accept the OPP goals' within their network community. These aspects have a great impact on the change of journalists practice specifically how they learn to deal with a particular situation in the newsroom network.

5.5 Intéressement (ANT), shared network goals (COP) and identity

This section compares the ideas of interressement in ANT, sharing network goals in COP and identity. In the previous ANT stage, the actors within the network have defined and described their role; this aspect is based on the focal actor goals. Through this stage the focal actors attempt to impose the actors to follow the network goals and involves the program of action. Callon (1986) argues that the intéressement is the focal actor statement 'to impose and stabilise the identity of the other actors it defines through its problematisation'(Nespor, 2014, p.14). In this way, the news producer, as an example of focal actor, deals with actors to agree to follow the key goal of newsroom network and share their ideas with other actors to work together. In this way, the acceptance of the actor allows them to obtain their identity to work and to follows the key goals of the network. Nespor (2014) provides an explanation of intéressement: 'the interressement succeeds in fixing identities and memberships, enrolment interrelates those roles and fashions the identities into a system of alliances' (Nespor, 2014, p.14). The actors within the network are 'called upon in the problematisation of a set of actors can accept or refuse to join the programme of action' (Franz et al., 2012, p.64). Also, the situation is similar for the nonhuman actors who can also accept or refuse to join the program of action within the network (Franz et al., 2012, p.64). This reflects the work of Latour and Woolgar (1979) in *The Laboratory Life*, where the scientists within the laboratory have their own joint project and negotiate involvement in the project. Wenger (1998) perceptively emphasised that there are negotiations between the community members related to their everyday life and practice. In this way, Nespor (2014) claims, 'there are strategies at hand for a group of actors to convince the other group'(Nespor, 2014, p.14). Hence, the news producers as an example of focal actor within the newsroom network attempt to conduct this sort of negotiation

in order to convince the human actors (i.e. news editor, news director etc.) to join the news project. This aspect of the network relates to the stabilisation of the actors' (the journalists) identity and their understanding of the strategies of network action; in particular, how they follow the key goals of focal actors.

Latour defines the term *intéressement* as the 'interests', which 'are what lie in between actors and their goals'. Latour claims that this situation creates a tension, 'that will make actors select only what, in their own eyes, helps them reach these goals amongst many possibilities' (Latour, 1987,p.108-109). The key requirement from the news workers in the newsroom network is to follow the news producer's goals as an example of focal actors. Through this action, the actors are able to share their identity, goals and learn how to solve their problems within the newsroom network. Identity, in this manner, refer to understanding of the actors to their practice, ability to organise their relationships within the network program, and, also, how they follow they focal actor goals within their network. In other words, Wenger (1998) claims that 'our identity includes our ability and our inability to shape the meanings that define our communities and our forms of belonging' to the network (Wenger, 1998, p.145). In a similar way, Skelton (2013) argues that the identity of the actor is based on the situation of the networking action and practice:

'...Identities are shifting contested stakes of networking practices that seek to produce or maintain a certain configuration of social space by excluding or restricting some people and things from participation while recruiting and reconstructing others to fit into the network'.

(Skelton, 2013, p.64)

Thus, the notion of identity provides the network with more stabilisation and encourages the actors (as human actors) to enrol in the program of action within their network. This in turn creates more interaction within the network, in order to share goals, practice and interests amongst them.

5.6 Enrolment negotiation (ANT) and actor practice (COP)

This section compares the notions of enrolment negotiation in ANT and actor practice in COP. Following the formation and creation of the network in ANT the focal actors in this stage attempt to define and coordinate the roles of actors within the network. Also, the focal actors try to convince the actors to agree and accept the key goal of the network in order to act effectively (Onsrud, 2007). The news producer as an example of focal actor in the newsroom network attempts to convince other actors through different approaches and ways, such as ‘an imperative statement inscribed on a sign’ (Latour, 1990, p.104). For instance, providing instructions, holding meetings, face-to-face talks, group discussions, blogs, messages, email and board notes in order to support their roles and position within the newsroom network activity (see, Latour, 1990, p.104). Also, this sort of action is adopted in order to make the news practitioners behave according to the news producer’s requirements within the community network (Latour, 1990).

In many aspects, “ the community of practice model has significant parallels with Actor-Network Theory”(Hughes et al., 2013,p.8). Barton and Tusting (2005) provide a more detailed explanation related to the concepts of Latour and Wenger, stating that:

‘... Actor network theory uses metaphors of " network" and "nodes" rather than Wenger's notion of "communities". A network involves a mobilisation of resources or “agents”, which typically includes physical materials, representations and people and the creation of what Latour refers to as “ stable mobiles”. These are representations of aspects of the world that are portable and thus can be accumulated and combined in new ways at a distance and used to co-ordinate action from within centres of power there is a strong parallel here with Wenger’s use of the term reification’.

(Barton and Tusting, 2005, p.28, 29)

Jonassen (2004) identifies the practice and collective processes as key similarities between the COP and Actor-Network Theory. Also, in her review of Wenger's (1998) model, he indicates that this concept draws on the "notions of identification (to indicate the individual) and negotiability (to indicate the community)" (Jonassen, 2004, p.210). However, the ANT provides a useful way of "characterising the system and understanding its functioning network approaches can prove useful for observing the dynamic transactions of a system as a simultaneously functioning unit" (Jonassen, 2004, p.210). In this way, ANT theory "provides us with the means to analyse collective practice and (re) design the technology that supports and facilitates the involved actors" (Jonassen, 2004, p.210).

The negotiation between the news producers and news editor as an example of negotiation between focal actor and actors in the newsroom network reveals how the meaning of their practice, goals, repertoire and mutual engagement occurring within interaction between the actors. In this manner, the ANT approach provides an explanation of how the processes such as 'legitimate peripheral participation' happen in the network, in order to conduct coordination between the existing old actors and newcomers within the network. Also, this approach focuses on the way people deal with and act with nonhuman aspects of the newsroom network in order to create the influence over workplace and time of action (Hughes et al. 2013). Lave and Wenger argue that the "legitimate peripheral participation, the ability to learn would develop in close relation to the ability to perform tasks" (Lave and Wenger, 1991, p.21). In the framework of newsroom network the old journalists attempt to provide and pass on information to newcomers (journalists) regarding their new environment and their practice, for instance sharing their experience in order to tackle a particular news practice problem.

5.7 Mobilisation (ANT) and understanding practice (COP)

This section compares the ideas of mobilisation in ANT and understanding practice in COP. The news producer as an example of focal actor ensures that all newsroom members (actors) conduct news practices according to the network

mission. The mobilisation of the actors with the key goals and network interests is an essential aspect of the process of stabilisation. If the network action is successful or not, it is necessary to consider the mobilisation phase (Tatnall, 2010). Within the newsroom environment this relates to 'who speaks in the name of whom? And who represents whom. These crucial questions must be answered' if the news practice and project led by the news producers is to succeed (Callon, 1986). This means that the news producer attempts to ensure the surrounding journalists (actors) have coordination and engagement in news practice to make the network stable and to reach the key goal of action program. Through this engagement of the actors, the actors within the network have an understanding for their role, goals and news practice. The term of the practice in COP 'is about meanings as an experience of everyday life' (Wenger, 1998, p.52). Wenger (1998) emphasises that meaning 'is located in the process called negotiation of meaning' (Wenger, 1998, p.52). In the ANT perspective much of the interaction between the human actors involves, the negotiation between the actors particularly human to human, to convince them to follow the network practice. In other words, Wenger (1998) argues that the negotiation of meaning 'involves the interaction of two constituents processes, which are called participation and reification' (Wenger, 1998, p.52). However, the actor within the network has a commitment to action program according to the key goal that is determined by the focal actor. This aspect allows the actor to participate in the action program and become involved in the practice. In other words, in the COP model, the participation and reification form is an essential part of human actors experience of meaning and also, the practice (Wenger, 1998, p.52). By way of clarification, Barton and Tusting (2005) argue that 'reification [in COP] entails not only the negotiation of shared understandings but also enables particular forms of social relations to be shaped in the process of participation' (Barton and Tusting, 2005, p.26)

The developments that happen surrounding the actor are connected within the network. Similarly, the progress that occurred around the actors shared goals and interests and the negotiation of solutions for the network problems encourage them to reach their key aim and make the network stable. Hence, the

journalists attempt this in order to maintain the obligation for their program of action and themselves as OPP within the newsroom network. In this way, the news producer negotiates with many of the actors as an example of a network leader (in COP) or focal actor (in ANT)(Fox, 2000).

5.8 Learning in COP and ANT

The present section provides an explanation surrounding the collective characteristic of learning in relation to the human actors in the network. The section explores how COP and ANT understand the process of learning in the network. The section offers key compare between the learning process in COP and ANT model. Fox (2000) claims that the COP and ANT “together make a stronger contribution to our understanding of organisational learning” (Fox, 2000, p.853). Similarly, Weiss and Domingo (2010) argue that the “ ANT and Cop position individuals and their initiative in a collective context that is the result of combine efforts, conflicts and initiatives”(Weiss and Domingo, 2010,p.2). For instance, the news producer’s job as an example of focal actor in the network, guides the journalists to follow the key goals, provides news crew instruction and conduct discusses with them to make network stable.

In this context, Bleakley et al. (2011) argue that the social theories such as ANT and COP have shared key common aspects, including: ‘the learning occurs in two contexts the social one of people interacting and the cultural one of people interacting with artefacts such as material objects’ (Bleakley et al., 2011, p.68). Also, Wenger (1998) and Latour (1979) in the context of both the ANT and COP models, emphasise the learning process as dynamic process within the network. Bleakley et al., (2011) state that:

‘...They are interested in how learning happens through time as well as in space they frame learning as dynamic, future oriented and unfolding. This is particularly important because learning is not just thought of retrospectively (what I have learned) but prospectively (what and how I may learn). This offers a historical dimension to learning’.

(Bleakley et al., 2011, p.68).

In other words, the COP model supports the notion of 'shared repertoire such as tools, natural resources, transport technologies' (Hughes, et al., 2013, p.1995). This provides journalists with the knowledge to shape their behaviour according to the instruction of the news producer and the key goals of practice. The journalists belonging to the newsroom network, this provides them with experience and knowledge in order to share their abilities, to solve the problems and work together. Through this aspect the newsroom actors have the same understanding in order to follow the key goal of the news producer. Also, the essential aspect of the journalists practice here is the shared repertoire of dealing with the situation of news practice in an appropriate way. This aspect includes the journalists belonging to community, interacting with other, sharing sense to solve the problems, and exchanging information as well as experience in order to fulfil the news producer's statement.

Latour (1990) argues that 'where the sign, the inscription, the imperative, discipline, or moral obligation all failed (Latour, 1990, p.104)' this instruction guides the journalists in order to follow the key goals of the news producer, which impacts directly on the quality of news and the stability of the network. Therefore, if the process of learning, shared repertoire and exchange of knowledge between the network speakers and other human actors does not work well, this leads actors to not behave according to the rules of the community, communication standards and principles their network.

The COP model is primarily based on the notion of learning and knowledge sharing amongst the community members. The COP model is more able to describe the situation of sharing knowledge, learning and exchanging experience between the community members, such as discussions surrounding the producing of the news package or solving problem for a particular situation within their news practice. In this aspect, Bleakley et al., (2011) argues; 'learning is not only the accumulation of knowledge, skills and values' within the network.

Wenger (2009) emphasises that technology is a good tool to improve and develop the boundary of practice, skills and share knowledge and learning between the community members. Also, Wenger (2009) argues that technology plays a great role in organising the relationships between humans and making more interaction amongst them. ANT adds to this stronger active role for the technology. Barton and Tusting (2005) mention that the 'actor network theory suggests, then, that objects can be seen to have agency in the sense that they can act in the place of human beings to mediate and coordinate the activities of others' (Barton and Tusting, 2005, p.29). In this way, Bleakley et al., (2011) describe this aspect as 'network of association' by indicating to the association amongst the people and artefacts, also, the association of people to people.

5.9 Overall integration of ANT and COP as models of collective action

The approach chosen by Latour was 'to become part of a laboratory, to follow closely the daily and intimate process of scientific work' (Latour and Woolgar, 2013, p.12). The work of scientists together is an essential aspect of engagement in everyday life and negotiation within the laboratory. Also, Wenger (1998) demonstrates that the COP model 'is result of the collective process of negotiation that reflects the full complexity of mutual engagement' (Wenger, 1998, p.77). Further, Wenger (1998) argues, 'the work of community maintenance is an intrinsic part of any practice' (Wenger, 1998, p.74). Regarding to the Latour and Woolgar's notion, they provide a 'description of the collaborative work of sciences in the laboratory life' (Schleifer, 2000, p.112). In particular, Latour and Woolgar (1986) argue 'the idiosyncratic, local, heterogeneous, contextual, and multifaceted character of scientific practices' within the laboratory (Latour and Woolgar, 1986, p.152). In this context, the newsroom network provides a great space to explore the collaborative news practice between the journalists and collective process, for instance the collaborative teamwork of news production, everyday group meeting, sharing information resources, tools between actors, and cooperating with other workers within their environment.

The key characteristics between the newsroom and laboratory as workplace are the relationship of the human beings, and the interaction between actors. This means working together, under the goals of the network and dealing with devices in order to reach their goals. These relationships create an effective way for an actor to learn more, gather knowledge to follow the focal actor as a example of news producer or community leader, and also, to reach the key goal in order to make the news network production stable.

Wenger (1998) refers to this as joint enterprise arguing that 'it is result of the collective process of negotiation that reflects the full complexity of mutual engagement' (Wenger, 1998, p.77). This means that the scientists or journalists, in their workplace, have shared projects and interaction and negotiation in order to conduct their activities. Latour argues that the structure of the laboratory is a collective process and the actor must attempt to reach their goals within their network. Ihlen et al. (2009) argue that:

'.....the construction of scientific fact is by definition a collective process, it is happens within a network. Fact construction is so much a collective process that isolated persons can only build dreams, claims, and feelings, not facts. Scientists try to transform their own position into a black box'.

(Ihlen et al., 2009, p168-169)

In this manner, the laboratory practice is based on the actors participating in the action together and joining in with the activities within their network. Regarding this, Wenger (1998) also argues that the essential resource of keeping the community acting and working together, is the joint enterprise and the negotiation surrounding their shared project and goals. Wenger (1998) further exemplifies, claiming that the community is 'defined by the participants in the very process of pursuing it. It is their negotiated response to their situation and thus belongs to them in a profound sense' (Wenger, 1998, p.77). Therefore, in the laboratory as a workplace, there are scientists' activities relationships, goals and instructions to follow the focal actor, and acceptance for their position of working together, in order to make the network stable. Wenger

(1998) provides in-depth analysis surrounding the situation within the community and how participants conduct their practice, saying that ‘it is not just a stated goal, but creates among participants relations of mutual accountability that become integral part of the practice’ (Wenger, 1998, p.78).

5.10 The newsroom practice, COP and ANT links

This section provides a table with provide in-depth comparison between three concepts, the newsroom practice, COP and ANT. Moreover, the table attempts to explain how the key ideas are linked to each other in the newsroom network.

Table 5.1: Key links between newsroom practice, COP and ANT

	Newsroom practice	COP	ANT
1	The news producer or final gatekeeper of news ‘is a person who allows or denies a news story to get on the air’ the gate keeping process start with a single activity and with the news assignment of other news crew in the newsroom (White, 2005, p.225).	Community leader is ‘the practice leader is the acknowledged leader of the COP. His or her leadership is based on competence, not rank or position. Leadership in a COP can shift as the issues and concerns of the COP shift: they can not be appointed’ (Nickols, 2003, p.4).	Focal actor, here return to explain key role of the focal actor in the translation phases, in this context Rodger et al. (2009) provide essential describes for the role of focal actor for instance first, the role of focal actor in the problemisation is identifies the actor interests, second, the focal actor try to defined the OPP in the network. The third intéressement in this phase the focal actor attempt to convincing other actor within the network to accept the definition and their role to follow the focal actor. The next is enrolment

			<p>the actors accept the network goals and interests that determine by the focal actor. The fifth stage is the mobilisation the principle actor with the network represents others. The last stage is the black-box within this phase the ideas and knowledge of actors become entrenched.</p> <p>(Rodger et al., 2009. P.420)</p>
2	<p>The News editor is one of the most essential human actors and have great role in the process of newsgathering, news practice and newsroom assignment (Silcock et al. 2009). The other newsroom crew and journalists, they share news practice together in the newsroom and they have same characteristic of human actor in the process of news production.</p>	<p>Community members 'People become members of a COP through shared practices; they are linked to each other through their involvement in certain common activities'(Khosrow-Pour2008, p.2992).</p>	<p>The human actor within the network is essential of the process, in this context, Latour (2009) argue that 'A key assumption in ANT analyses is that humans are not treated any differently from non-humans, because 'without the nonhuman, the humans would not last for a minute' Fenwick, and Edwards, 2010, p.3). also, return to the key notion of Latour and Woolgar's in their study laboratory life ' the social construction of scientific facts' (Fenwick and</p>

			Edwards, 2012, p.61).
3	Avid news system in the newsroom allowed the journalists, news producers, news editors and news directors to share their practice and access the video library, news material, news script and rundown list (Keirstead, 2004).	The technology system of workplace is good tools to provide more interaction for the members involves in the process of learning and make connection between them. In this way, Schiavone (2013) claim, 'the Internet supported the aggregation of people communicating and sharing information about their interests, passions, or professional activities'(Schiavone, 2013). This perspective is fit for the virtual and face-to-face community.	Relate to the devices, Nespor (2011) argue that the device is key aspect of the shape change and mediated the change of network. In particular the interactive Avid technology in the newsroom provide huge instruction for the journalists to conduct their news practice. In this way, the device within the network, shifting the participation form, shape the action program construct new form for the activity and re-shapes the link between the allies during the enrolling within the network (Nespor, 2011).
4	The key goals of newsroom activity is producing news package. Usually, this goal determine by news producer in the newsroom conference meeting by involves main human actor of news crew. In this way, the journalists follow the news producer to achieve their key goal within their	The key goal in the COP is that the members participant effectively in the same practice in order to reach their goal. The key aspect of the community / network is share the practice and their goal to reach it.	The key goal of the network is determine by the focal actor and when the focal actor attempts to convince the actors to follow the goal in order to achieve it. Then, within the network there are

	newsroom network.		group of actors have same goal and follow the focal actor instruction (Tatnall, 2010).
5	The key practice within the newsroom focus on the everyday life of journalist and involves in the process of news production process (as an example of human actor in the network).	According to Wenger (1998) perspective the member of community share common interest, practice, exchange information, experience and knowledge across the organisation network (Borzillo, 2007, p.25).	Here return to the Latour and Woolgar , Laboratory life (1979), that Focus on the scientists (as an example of human actor) and ‘ the scientists practice more deal with the experimental creatures as instruments and technological artifacts’ (Kohler, 1994, p.6).
6	The shared domain in the newsroom allow the journalists to engage in the activities and work to gather in order to shared experience, information relate to their news practice and news production process within the network. In this context, Quinn (2005) argues that “it ways to promote and generate knowledge sharing within converging newsroom”. In one hand, this aspect means establish community of interest as one group of journalists (Quinn, 2005, p.1666).	The share domain in the COP model refers to ‘ implies that the COP member share an interest in and have questions within a certain field of knowledge’(Kimble, et al., 2008, p.335).	The scientific domain for the scientists in the laboratory are based on the scientists interest, everyday life, engage in the actions, share project and daily action in order to publish their activity in the context of journal paper, conference and presentation (Latour and Woolgar, 1979).
7	Within the newsroom workplace, there are everyday	There are great amount of interaction between	The argument of Latour’s focused on

	<p>news practice and interaction between journalists and news crew,</p> <p>For instance, the daily meeting to determine the news agenda and goal of day network.</p>	<p>the community members in the context of everyday life in the social world. In this context, Schiavone (2013) argue that ‘ the social interaction is the key mechanism for rise, development, and success of CoPs’ (Schiavone, 2013, p.28).</p>	<p>‘ what the scientists do in everyday life within the laboratory. In this way, the key discussion of Latour (1999) in the science studies ‘ the started when we first began to talk about scientific practice’(Latour, 1999, p.15). Thus, the human actors negotiated between each other surrounding their project together in order to reach the key goal of network.</p>
8	<p>The newsroom system, the structure, the regulation and the digital environment draw and establish sort of boundary for the journalists to conduct their practice and activity within the newsroom network.</p>	<p>Wenger’s emphasis that the ‘boundary crossing activities of different communities of practice in collaborative settings. This means the different sort of action and practice in different communities should bring together via a suitable setting’. For instance a setting represents the work context for the interaction between communities such as number and role of members’ (Gräber and Lang, 2012, p.36). in this way, Wenger referred to virtual and face to face community.</p>	<p>The ANT, also deal with difference of inside and outside (Tatnall, 2010). In this context, Latour, in his book Science in Action (1987) ‘ identified the inside as the laboratory itself, with all its heterogeneous combinations of scientists, machines, and natural phenomena . On the other hand , the outside of laboratory is the combination of the financial institutions , government and others’ (Tatnall,</p>

			2010, 137)(see Latour, 1987, P.158). the structure of laboratory construct a boundary for the scientists within their network.
9	Everyday life, practice and routine of the journalists in the newsroom is form their collaboration work and co-work within their workplace environment.	According to Wenger (1998) that the community construct on the groups of worker, collaboration action and learning together in order to improve skills and knowledge to form their practice and activity. In this context, Weiss (2008) argues that the 'COP as meta-theory can shed additional light onto how and to what extent collaboration occurs in the newsroom'(Weiss, 2008, p.281).	The form of the activity within the laboratory life of Latour and Woolgar (1979) is based on the collaboration work and tasks between the scientists; in particularly publish paper (Latour and Woolgar, 1979, p.62).
10	The journalists as an example of human actor within the newsroom and the Avid technology is an example of nonhuman actor within the newsroom network.	The member of community is an example of human actor and the technology tools is an example of nonhuman actor.	Here return to (Latour and Woolgar, 1979) laboratory life, that the scientists are an example of human and the device is an example of nonhuman in the network.
11	There are great amount of discussion and negotiation between the journalists and newcomer in the newsroom relate to their news practice and activities.	In the context, of the COP model, 'The negotiation of meaning more specifically the new comer negotiates the meaning of her or his	Through the process of negotiation between the actors in the network, they attempt to share and create common

		daily performances through the interaction with master practitioners in order to become a full participant within the community of practice'(Bang, 2008, p.25).	interest among the different actors in the network. In this way, Callon (1991) argues that 'actors' heterogeneous interests become aligned and embedded into technologies that stabilise the network'. Also, this process involves in two phases the translation and inscription (Nelson, 2009, p.59).
12	The journalists practice in the newsroom based on the relationships and interaction between the workers in order to create news item within the network.	In argument of Wenger (1998), one of key controversial matter has been the relationships and learning in the community. In this context, Wenger perspective, 'establishing relationships between things and making meanings of them are the basic foundations of learning, for instance, participating and reifying'(Barton, and Tusting, 2005, p.109).	According to Latour view, 'the social basically describe every connections or association between human and nonhuman actors' (Blok and Jensen, 2011, p.106). In this context, the newsroom network has enormous relationships and connection between varieties of actors that involves in the process of news production.
13	The digital technology, such as' Avid system enables the newsroom to ' get out of the linear age'. This aspect of the system provides the journalists to create relationships, times saving and improved versatility	The technology have great role in providing more interaction for the member in exchange information and involves in the learning process. In this way, Brown and Davis (2013) argues that	Latour and Woolgar (1979) refer to that the 'machines' transform matter between one state and another'. Also, Latour and Woolgar (1986) describe the

	(Pavlik, 2001, p.107).	the ' digital technologies play a fundamental role in allowing one to enter a tele-collaborative community of practice'(Brown, and Davis, 2013, p.267).	'inscription devices,' transform pieces of matter into written documents (Latour and Wooglar, 1986, p.51).
14	In the context of newsroom practice the journalists have the same identity that provide them ability to work and participate in the news activity within the news network.	One of the most essential aspects of the COP model is the identity. In this context, Wenger (1998) argues that the ' identity a way of talking about how learning changes who we are and creates personal histories of become in the context of the communities'(Wenger, 1998, p.5). Also, the identity of the member is essential, to participate with other members in the collective practice and learning in the community.	In the laboratory the scientists have the same identity of practice in order to reach the network goals, participate in the program action and follow the focal actor.
15	The newsroom practice is collective action, such as teamwork, group work or group discusses, in the social world	In the COP there are collective learning, share project, share domain, mutual engagement, shared repertoire in the community, there are interaction between the member in order to improve their practice,	In the network, there are group work between the scientists in the lab in order to reach their goal, produce text or artefact, the collective work here focus on the share project and follow the key goal of the network, collective action based on the program of network and the key goal of network
16	In the workplace, the journalist	In the COP, the members	In the laboratory

	<p>and ‘ news workgroup share a common way by which to converse, interact and work together in the newsroom’ (Weiss, 2008, p.149). Also, the news practitioners, they have share, tasks, domain and goals.</p>	<p>have common interest surrounding same matter or issues and cooperate to share their idea, feeling knowledge and information in order to find suitable solution for the matter (Wenger, 1998). Also, the members share their work, shared project, shared tasks, shared domain, and shared goals within the community.</p>	<p>Latour and Woolgar (1986) as practical example of share work, the actor as an example of human, they have shared goal, shared project, shared tasks and shared domain, such the everyday work of scientists in the lab find solution for their problem, work together within same experimental project and also, the actors shared the same goal in the network.</p>
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17	<p>Wenger (1998) argue that the mutual engagement is essential element of any type of practice. In this way, one of the most important aspects of journalists practice in the newsroom is mutual engagement between the journalists and mutual relationships amongst news crew.</p>	<p>Wenger (1998) view surrounding the notion of mutual engagement, explore that the result of mutual engagement between the community members reflect directly on the doing things together.</p>	<p>According to Latour and Woolgar (1986) in Laboratory life, the everyday life, routine, activity and scientists practice in the lab, refer to the mutual engagement between the human actor in the network. Hence, through the mutual engagement the scientists are able to manage their relationships and share project in order to reach their goal ,</p>
18	<p>In the newsroom practice, there are everyday discussion, negotiation between the journalists and coordination their practice within the newsroom network.</p>	<p>In the COP model, Wenger (1998) the negotiation and coordination are essential criteria of the community in order to the member conduct their practice</p>	<p>Here, let turn again to the practical example of Latour and Woolgar (1986), such the Laboratory and Hotel example. Baically, Latour ‘ emphasises an order ‘ networked’ in arrangements of human and</p>

			<p>nonhumans and the actions that join them up. Also, argues that it looks difficult to separate the respective human, practice and technical parts and that these parts come together in 'negotiation between people and things, in particular people and artifacts(Rau and Schönherr, 2013, p.165).</p>
19	<p>There are a wide range of connection and relation between the journalists and other resource of information within the newsroom network.</p>	<p>The key discussion of Wenger (1998) argues that the COP is establishing on the relation and connection between the members. Also, the members share their resource of community and build their resource of negotiation of meaning (Wenger, 1998, p.82).</p>	<p>In the front of this aspect ANT model suggested ' a framework for understanding how knowledge is developed and legitimised via heterogeneous networks of both human and nonhuman actors.</p> <p>Its emphasis on the idea that facts are created by translation between different actors, creates an indelible connection between the actors involved in a network and the knowledge and concepts that are held to be true'(Rydin and Tate ,</p>

			2016, p.29).
20	The understanding of journalists for their practice, identity, skills, and dealing with technology tools is an essential aspect of everyday life and news tasks.	The understanding of the community members for their practice, skill, dealing with technology tools provide them experience to improve their quality of work and relationships with their community network (Wenger, 1998).	The understanding of actors in the network for their key goal, everyday practice, skills of use device, essential tools to make the network more stable and help the actor to make system order for their relation dealing with technology tools to improve their quality of work.

5.11 Value of combining COP and ANT models in understanding newsroom practice

This section will discuss and identify the key aspect of the COP and ANT, and how they help each other in the explanation in the news practice and reading of news production within the newsroom network.

The ANT model has ‘considered the human and non-human actors as mutually shaping, transforming and translating each other in the course of networking practices’ (Spöhrer, 2016, p.3). In the literature, Van Loon (2007) has explained that the ‘applying of ANT to media analysis enables us to engage on a more ontological level with the very issue of mediation’ (Van Loon, 2007, p.115). Also, Hemmingway (2007) argues that ANT will help media research in order ‘to analyse news production at the specific level of news practice’ (Hemmingway, 2007, p.14). In spite of criticism surrounding the usefulness of ANT for media Couldry (2008) has argued that ‘the relationship between ANT model and media theory is significant’ (Couldry, 2008, p.106).

In this respect, the ANT approach and methodology that are adopted within this project provide tools to discovering the ontologies aspect of news production and the characteristics of the heterogeneous news production network (Hemmingway, 2007). Therefore, the ANT approach helps to understand the dynamics of innovation through explaining the relationships between the social actors and the technologies within the network (Micó, 2013). Plesner (2009) argues that this approach provides an exciting new point of view of analysis that focuses upon the holistic research of mass mediation practices and process, specifically, the ANT methodology concentrates on the heterogeneous actors, including the journalists, ideals, codes, symbolic construction and, also, the material element within the network (Plesner, 2009). Furthermore, the ANT approach, and more specifically 'the principle of symmetry between the human and non-human as well as attention to the work of assembling and disassembling, can help ethnographers disclose the socio-technical process that structures political power' (Anderson and Kreiss, 2013, p.366). Hence, application of the ANT within the newsroom network by using the ontological method is significant, especially via implementing the key principle of symmetry of the ANT approach that provides the researcher with great tools to understand news practice, shape of the network and reading news production, also, relations of technology and journalists within the network. Furthermore, this aspect helps the researcher to identify the key role of the actors within the network that are involved in the news production process.

There are many key elements in the COP model that help the researcher to concentrate on the development of new technology in the modern newsroom community. Through application of the COP model in the newsroom, the ethnographer is able to discover more surrounding the journalists' practice, professional identity, the form of mutual engagement, relationships among journalists, negotiation, involvement in the learning process, exchange of knowledge and, also, provides in-depth understanding related to the social world within the newsroom community (Wenger, 1998).

The key notion of the COP is based on the learning process and learning always surrounds the change in some aspect of the community (Rogers, 2006). In this

respect, the COP provides tools to discover more regarding the learning process within the workplace network, especially the learning transformation among the journalists as individuals and how they learn issues to conduct their practice and how they learn more surrounding their activities in dealing with technology tools (Schmitz, Weiss and Domingo, 2010). Also, the COP model concept helps to provide an explanation surrounding the dynamic processes of news practice, especially the concentration on the practice of media and news production, at the position. These aspects include the newsroom as a workplace and the news production crew management (Husband, 2005).

Schmitz, Weiss and Domingo (2010) argued that the key purpose of application of the COP model in the newsroom is in order to identify the innovations that are negotiated among the journalists within their workplace that occur to redefine everyday news practice, especially the dynamics of the news production procedures and the use of technical tools by the journalists within their network community (Schmitz, Weiss and Domingo, 2010). Further, the COP approach points to key concepts in the workplace, such as the negotiation of goals, collaborative learning, shared concern, practice concern, relationships and also mutual engagement. This aspect of the community has been discussed in the context of ANT – Latour and Wooglar linked it to *laboratory life*, when the scientists conduct their everyday practice as a similar example of newsroom workplace and journalists' news practices.

Thus, the COP and ANT models in contribution can in many aspects to provide in-depth understanding surrounding the connections among the news practitioners and technical aspect of the newsroom network. Also, these two theoretical models help to provide analysis surrounding the journalists' practice in their newsroom network. These approaches provide an essential explanation of the learning process, sharing knowledge, mutual engagement, journalists sharing projects and negotiation between the journalists within the newsroom. Through the ANT, the researcher is able to find out more about a variety of types of actors with the procedure of news production processes. Further, the ANT helps to understand the network and network mapping, also the roles and positions of the newsroom members in the procedures of news production. The

COP completes the ANT model in dealing with journalists and technology in the process of news production. In particular the journalists learning, interaction, exchange of experience and improvement of their skills in dealing with technology tools in the newsroom.

5.12 Conclusion

The chapter has discussed the key aspects of both the ANT and COP models in the framework of the newsroom practice and news network production. In particular, both the models are based on the position of the individuals in the context of practice environment (see Weiss and Domingo, 2010). Furthermore, the ANT and COP together provide a firm basis for contribution in order to obtain understanding of the situation of learning in the network (see Fox, 2000). The chapter has also provided an account of how the learning process happens in two forms such as (social cultural), which each as interact with the artefacts (see Bleakley et al. ,2100).

Consequently, the researcher concludes that there are several shared characteristics and common aspects between both ANT and COP. In particular, the ANT and COP models provide tools to analyse the news practice, learning process, negotiation between actors and the everyday life of journalists of newsroom. Also, using ANT and COP could provide more benefits for analysis of other types of action and news practice in the newsroom. Lastly, table (section, 5.10) provides an overview of surrounding the link between the concept of the newsroom practice, COP and ANT. This table offered the key connection between three concepts and how they work together within this research project.

Chapter Six: Methodology and methods

6.1 Introduction

This research project takes a qualitative approach to examining the impact of new technology in the Kurdish news channels. This chapter provides information on the research methods and the process of data collection used. These methods include, in-depth interviews, observations and documentation. The first part provides a brief overview of the ethnographic approach, including the advantages and disadvantages of such an approach. The second part of the chapter offers information on the aims and objectives of the study. This part also discusses the challenges and obstacles faced in the field. Part three provide a description of the KNN and GK Kurdish news channels as case studies. More generally, this chapter will provide information on the nature of the fieldwork, research subjects and the period of data collection. The final part of the chapter is devoted to the method of data analysis, the research process and grounded theory.

6.2 Methodology: why the ethnographic method?

The research project has applied an ethnographic case study approach in order to analyse and interpret the news practices and technology changes in the modern newsroom. This section will provide justification for the use of an ethnographic approach in the context of dealing with specific issues in the Kurdish newsroom channels. In particular, the ethnographic approach provides effective techniques for comparing the two different settings of newsroom practices, the automation one and the non-automation system.

Ethnography is an important approach in qualitative studies and provides the researcher with an in-depth understanding and means of exploring the social world. The ethnographer is part of the field of study, attempting to observe the patterns and behaviours and analyse the social network between the participants. Through this action, the researcher participates in the community and directly joins in the activities (Scott-Jones and Watt, 2010). This provides

the social researchers with more opportunities to see, hear and touch upon the story of the journalists' everyday life in closer detail.

Through this approach the ethnographer attempts to obtain an understanding regarding people's behaviour in everyday life and also to monitor what they do and say regarding their practices and routines (Brewer, 2000). In this phase, the investigator is able to recognise the social, cultural and human behaviours efficiently and to understand how the subjects carry out their everyday routines and practices. The key purpose of the ethnographic approach within the context of this study is to examine and explore the human experience within the particular situation of TV news production (Murchison, 2010).

The current project uses overt observation (instead of covert) in order to gather fieldwork data and conduct non-participant observation in two workplaces (Riley, 2000). This makes the ethnographic approach different from other methods that create specific situations to participate in the project, such as research that is based on an experimental set-up (Hammersley and Atkinson, 2007). This is particularly suitable for conducting the field study of social order and social worlds (Brewer, 2000).

In the case of newsroom practice within a particular community of journalists and news practitioners, the ethnographic approach provides opportunities for the researcher to discover and develop their perceptions of the workers' actions, patterns and behaviours in the workplace (Cotter, 2010). Through this approach, the ethnographer is able to focus on the newsroom community structure and the setting of the social network. Furthermore, it is a useful method for gaining knowledge about the culture, practice, conditions and social characteristics of the newsroom. This helps to provide a better understanding of the news production process as part of everyday life and the activities of the community. It is an illustrative and essential research tool for the individual ethnographer to observe a given situation, for example the newsroom practices (Freeman, 1998).

Ethnographic methods are mainly based on the researcher skills as an observer in order to observe human activity in a particular condition; such as newsroom

practice (Wolcott, 1999). The researcher is able to recognise the meaning of the relationships and interactions between the journalists and the uses of new technology in their newsroom practice. Through this approach, the ethnographer has the ability to concentrate on social activity and the meaning of the practice, everyday experience and behaviours. In this case the researcher has a particular and focus on their interaction with new technologies, the daily discussion, the social order and the news practice culture (Van der Stoep and Johnson, 2008). The ethnographic strategy allows the social researcher to monitor, observe and demonstrate how the newsroom journalists are conduct their tasks in their specific environments (Morrow, 2008).

The ethnographic technique is based on gathering data and information by processes such as in-depth interviews, non-participant observation and documentation. These methods provide the researcher with the ability to focus on many essential aspects of the community. For example, it provides the researcher with opportunities to monitor and assess the social 'goings-on' in the newsroom, such as social stories, patterns, routines, forms of news practice and general communication in the news domain. It is able to support the ethnographer in obtaining detailed information regarding the interaction between the technology and the journalists. It also offers the ability to examine how the journalists deal with their tasks and interact with their colleagues within the community of the newsroom (O'Reilly, 2012). It offers a clear sense of the communicative events and interactions between the community's members (Corbett, 2003).

6.2.1 Advantages of the ethnography for ANT and COP

The key elements of this research project are based on the use of COP and ANT. Both of these theories have developed from detailed ethnographic studies of specific context. Wenger (1998) provides a detailed explanation of the role of ethnography within COP approach. Ipgrave et al. (2009) argue that the concept developed by Wenger is 'based on and exemplified by his ethnographic analysis of an insurance company' (Ipgrave et al., 2009, p.219). ANT also works in the context of ethnographic research. Geertman et al. (2013) argue that the actor

through the network use of in-depth interviews and ethnographic study is the best tool for following. The same authors how the ANT approach to inscription requires analysis that includes texts, but also images of many sorts, databases, and anything else that can be considered central to knowledge creation' (Geertman et al., 2013, p.420). Therefore ethnographic methods support the combination these two models with in-depth information about the newsroom network and news practitioners.

This section provides information on how the applying of the ethnographic approach helps the researcher to gather in-depth data in the field. There are many advantages to applying the ethnographic approach in the current study. The researcher conducted his fieldwork in an overt observational manner. This means that the researcher declared his identity to the participants in the research and informed them about the project aims (Riley, 2000).

This approach allowed the researcher to stay in the field under study whilst the other participants were aware of their presence. The key tasks of the researcher in the newsroom were to watch the journalists' actions, record events and ask questions during participation in formal or informal interaction (Hammersley and Atkinson, 2007). The ethnographic approach allowed the researcher to gain information and understanding surrounding the everyday life of the journalists and how they conducted their assignments in the newsroom environment (Morrow, 2008).

The ethnographer is able to explore more the everyday activity of the journalists, what they chat about, their meetings and the discussions that occur within their workplace. This characteristic of the approach is an essential aspect of both COP and ANT studies (Pescosolido, et al., 2011). The ethnographer is thus able to focus directly on the key aspect of COP and ANT; specifically, the methods allow the researcher to understand and collect detailed evidence of the particular behaviours and acts of people in the newsroom (May, 2007).

6.2.2 Disadvantages of the ethnographic approach

This section is devoted to a discussion on some of the disadvantages of the ethnographic approach within the framework of the present research. There are disadvantages to ethnographic approaches, which concern the boundaries of the methods in the field. The key problem is the issue of the lower external validity of the interviews and observations. Another disadvantage of this approach is the limitations involved in setting up the sample of study; for example, it is difficult to obtain quantitatively representative numbers of participants in the fieldwork (Quimby, 2012). Another potential drawback of an ethnographic study is not having access to other methods, such as surveys. This type of research concentrates more on the organisational domain or on one particular context or person's culture and community. This characteristic of the approach provides in-depth detailed information on a particular framework or the conditions of phenomena under research (Myers, 2013). Also, the researcher doing the fieldwork is disadvantaged by, for instance, changes in the behaviour of participants and their patterns of performance (May, 2007).

In this sense, ethnographers have a narrow content in which record their notes and observe the journalists' activities. This feature of the approach encroaches upon the private life of the participants and journalists and their freedom of privacy (Bryman and Bell, 2011). For example, the everyday life of the newsroom meeting and the routines, especially the topics that related to the news practice policies of the organisation. Regardless of the weaknesses of the ethnographic method, however, it is a key approach that is commonly used to understand and discover information in the context of the social world, and has the benefits of working within the natural setting to obtain information outweighs the above-listed disadvantages.

6.3 Research design and methods

6.3.1 Aims and objectives of the study

This research project seeks to explore the impact of new technology on the process of the news production. Observational work will be conducted in order

to examine the connection between the human and the non-human actors within the newsroom network. Furthermore, the research addresses the workflow of the automation and non-automation systems in the newsroom. The key aim of the present project is to focus on the newsroom practice, the COP and the socio-technical system (STS) by applying ANT and COP. In addition, it seeks to discover, explain and understand the following sets of objectives:

- To explore the impact of new technology on the news production processes within newsroom network.
- To assess the interaction of the journalists and nonhuman actors according to the new digital systems in the newsroom.
- To study the COP (community of newsroom) that exists in both digital and non-automation newsrooms.
- To explain the influence of the new technology on the managerial and institutional context.
- To study the influence of digitisation on the newsroom and to create comparisons between the KNN and GK channels.

6.3.2 Practical challenges for study

The researcher faced many challenges and problems in the process of data collection in Iraqi-Kurdistan. The first problem that faced the researcher was a time constraint in conducting interviews with the journalists in KNN and GK. The participants had limited time to speak to the interviewer. In particular, the schedule of the news hub includes arrangements of daily activities that subsequently create stress and place much responsibility on staff members. The researcher had to find a suitable and flexible time schedule to engage with interviewees, which proved difficult. In order to solve this issue, the researcher stayed longer in the newsroom to conduct the interviews with the workers, especially those with the news producer and news editor. Officially, each shift in the newsrooms is between seven and eight hours.

Other problems were found in relation to the ability of workers to speak easily about their life story and experience of news practice. This was a problem particularly for the women. The key reason for this situation was a sense of

shyness about expressing themselves. Also, the new workers in the newsroom had less experience of the new environment of work, and many of the new workers were women. The lack of experience of the workers created unfavourable situations for speaking about their daily practice and tasks. In this regard, they discussed often only one aspect of their newsroom practice.

Another problem that the researcher faced in the field was the limited resources and documents sources for the news channels. The studies that have been conducted in the field of communication and media in Iraqi-Kurdistan are few and focus only on particular areas in the television newsroom.

6.3.3 Research sample selection

This study deals with a particular situation in relation to Kurdish news channels, that is, that one is a automation newsroom and the other non-automation one. These two channels broadcast their news program for Kurdish local and international Kurdish community, in the Kurdish language.

The selection of the automation and non-automation newsroom allowed the researcher to understand both environments and create a comparison between them. Also, the researcher decided to choose these two samples because both channels (GK and KNN) are located in the same city in Iraqi-Kurdistan.

In the context of the project, the researcher dealt with the news and production practices in the newsrooms. KNN and GK are essentially news production organisations in the Iraqi-Kurdistan region. Also, KNN is the first Kurdish news channel to implement and use an automation system, (Avid technology). This factor allowed the researcher to select the cases in order to make logical comparisons between the automation and non-automation systems of news practice in the newsroom. There is competition between each channel to broadcast high quality news production in the region. Also, KNN and GK have two different perspectives politically (one is pro the opposition party and the other, pro-government): this means that their approach to news stories can differ.

According to the annual report of the Metro Centre (Journalist Rights and Advocacy) 2014, the proportion of violent attacks on journalists from KNN is higher than those from GK. The record refers to different forms of violent attacks on KNN's journalists, which came to 26. In the same period, GK journalists only came under attack five times. These findings subsequently assisted the researcher in making comparisons and in recognising the differences and the similarities between both channels in their news practice. The background research also provided the researcher with an additional understanding of the situation in relation to the journalists' practices and work obstacles outside of the channels.

Another aspect that helped the ethnographic researcher to select both news channels was his own experience in the field of news practice and news production within Iraqi-Kurdistan. The researcher has worked in many positions in the field of news broadcasting, especially in the non-automation newsroom. From 2004 to 2011, the researcher worked in many areas at the Kurdsat Broadcasting Corporation, including as news editor, news reporter, chief of news department, the correspondents' trainer, news documentary producer and the chief of documentary and reportage department. These experiences provided the researcher with the ability to recognise the important aspects of news practice in both channels and how to conduct the research project in the field of newsroom practice.

6.3.4 The Gali Kurdistan Satellite Channel (GK)

The 'GK Sat' news channel (Gali Kurdistan Satellite Channel) was launched in 1992 as a local broadcasting channel; it was a more general channel and broadcast different genres and items of news. It was supported as the mouthpiece of the Patriotic Union of Kurdistan (PUK) party. This channel is deeply rooted in the history of Kurdish media broadcasting. It is also the first Kurdish television channel to be established since the Kurdish revolution in March 1991. In 2008, GK started world service news broadcasting with a non-automation system. Since 2008, the channel has developed as a world service and has changed its news practice strategy, particularly by opening new offices

in many places internationally and around the region. The GK service started broadcasting international live news 18 hours a day in the Kurdish language. This progress by GK has impacted on the content of the news and news services within the channel. The news services focus mostly on news from regional states, the Middle East and Iraq, as well as providing domestic news (see chapter 1).

GK produces many different news packages, including news stories, breaking news, a breakfast programme, special coverage, documentary films, sports news, economic news, weather bulletins and exclusive news programmes. GK's news practice is built on non-automation newsroom system and it has no fully digital management information system available.

6.3.5 The Kurdish News Network (KNN)

KNN (the Kurdish News Network Channel) was launched in 2008. KNN newsroom uses a digital automation system for news production. KNN is the first channel to use Avid technology in the Kurdistan region (Iraqi-kurdistan). This news channel is a branch of the Wusha Company and it is also one of the independent Kurdish media institutions. The channel primarily broadcasts in Kurdish, which has two main dialects, Sorani and Kurmanji. Also, the work of the KNN is based on broadcasting news program to Kurdish national and international news. Furthermore, KNN focuses on the broadcast rolling news reports of politics, the economy, sport and culture. KNN broadcasts news 24 hours a day. This consists of news headlines every hour and short news bulletins every quarter of the hour. Also, it broadcasts live coverage of news events using a mobile satellite newsgathering truck (SNG) and office SNG. The daily updates of the news are completed using many news genres, for example, in-depth interviews, news programmes, news packages, studio guests and live interviews. The news channel also produces many different types of documentary films and foreign news materials for Kurdish audiences.

KNN headquarters is located in Sulaimani city in Kurdistan. The channel has more than 160 workers working in the Kurdish region and around the world. The channel has the biggest news reporter network, which supplies daily news

reports in Kurdistan, Iraq and internationally. The channel has four offices in the main Kurdish cities in the region. KNN's strategy emphasises freedom of expression for the people and it often criticises government projects. Hence, the channel seeks to provide people with information and encourage them to express their viewpoint about issues in the Kurdish region. Since 2008, KNN has become one of the most important subsidiary institutions of Wusha Corporation Media, which was launched by the opposition political party in Kurdistan.

6.3.6 Nature of fieldwork

The key requirement of ethnographic studies is the participation of the researcher in the field under study and involvement in the everyday life of the community (Emerson et al., 2011). The entry of the researcher in the fieldwork provides opportunities for hearing about the journalists' stories, as well as a better understanding of the action within the newsroom community. In this regard, the main task of the researcher in doing fieldwork is to attempt to understand the real setting of the newsroom in order to take a close look at the action and search for information in the community (Blommaert, et al., 2010). This provides the ethnographer with the ability to make a direct observation and take notes on the activities, behaviours and events that take place.

Another key requirement for conducting this type of research in the fieldwork is the development of the researcher's relationships with the participants to find the meaning of the events and actions that occur (Fitzpatrick, et al., 2011). The researcher's engagement in the fieldwork consists of two types: long-term and short-term participation. This characteristic is based on the type of research and the requirements of the project. In the context of this project, the researcher preferred to work short-term in the newsroom in order to gather the data and information on the journalists' everyday lives and news practice. In this period of work, the researcher attempted as much as possible to collect information, data, documents and personal information and to conduct interviews and participant observation in both workplaces.

The researcher obtained permission from the channels (the administration and head of news department) to enter both workspaces. The researcher had a

letter of permission from both channels and was consequently allowed to conduct the research in the newsrooms freely (see letter of confirmation in Appendix 1-2). The process of data collection covered three workplaces: the newsroom, the control room and the studio room. The researcher watched the news practice, the journalists' actions and the behaviour of the workers in dealing with equipment. During the fieldwork, the researcher had to take notes, observe journalists when they carried out their tasks, attend meetings between news crews and ask questions about their everyday lives or chat with them informally during coffee breaks. Also, the researcher took nearly 1000 pictures, and made 20-minute video and audio recordings with journalists' in the work environment. The researcher conducted short and long interviews with members of the newsroom community as well as asked them about the news production process inside or outside of the channel. In this way, the researcher used multiple techniques for the process of data collection.

The researcher declared his identity as a researcher in the fieldwork and introduced himself overtly to conduct the research and the process of data collection. In this manner, the researcher attempted to explain the key goals of the project and describe the importance of the project findings. Furthermore, the researcher explained how the participants had the right to withdraw from the research project whenever they wanted (*see appendix, 5*). This aspect of the project was explained for the participants before the interviews were conducted, a key aspect of this project being the ethical element of ethnographic study.

6.3.7 Period of data collection and access fieldwork

During the data collection period, the researcher spent more than one month (from 1/12/2013 to 10/01/2014) in both newsroom channels. During this time the researcher attended each workplace every day. The researcher spent 20 days in each newsroom and the day went from 8:00am to 12:00pm during the week (including the weekend days). The keys goals of the attendance in the fieldwork were to conduct the observation, the in-depth interviews and the documentation.

The researcher's activity in the newsroom was based around a list of topics related to the research question. As part of the daily tasks, the researcher attended the workplace and coordinated with the news crew. They, in turn, supported the researcher, providing more details on their news practice. In this way, the researcher created an excellent relationship with the news producer and news director.

Through the morning meeting with the newsroom crew, the staff gave the researcher daily plans on schedules in order to fully understand the nature of each newsrooms workplace. These provided the researcher with opportunities to build an understanding of and knowledge about the newsroom practice, particularly the implementation of new technological tools. Moreover, this access extensive allowed the researcher to recognise the workers relationships and the nature of their community and helped to build an understanding of the newsroom network structure.

In both channels (KNN and GK), the researcher contacted and coordinated visits to the television station with the relationship manager, in particular, the organisation of accessing time in workplace. The researcher provided a formal letter from the University of Liverpool to explain the reasons for carrying out this research.

6.4 Research design and methods

This section provides information on the ethnographic tools used in the project. For these purposes, the procedure of the fieldwork and data collection was established around the use of three main tools: non-participant observation, in-depth interviews (one-to-one) and documentations.

6.4.1 Non-participant observation

The non-participant observation tool is one of the most practical techniques of the ethnographic approach. The non-participant approach provides the ethnographic researcher with a tool to deal with the situation by watching and writing notes on people's behaviour and actions. This tool has been very extensive used to obtain understandings of particular social activity and human

behaviours. This tool was used to observe the setting of the newsroom and record the nature of the journalist's performance in the workplace, and to gain an understanding of the newsroom culture of work, social values and news practice production (Griffiths, 1995).

This participation of the researcher in the workplace setting was done to observe and track the journalists' activities in the newsroom network (*see appendix 3*). This means that researchers had a fixed time period to conduct observations with participants carrying out their activities (Kirby, et al., 2000). The use of the non-participant observation tool is based on taking on a role in the setting as an independent observer to monitor activities and social action in the newsroom (McNeill and Chapman, 2005). The ethnographer attempted to record everything that was realised and heard in the fieldwork. Thus, the notes that were recorded in the field became an important part of guiding and managing the next step: the in-depth interviews with participants (Steen and Roberts, 2011). In 2008, Maroun described how non-participant observation provides more flexibility to the researcher for reducing potential missing data and error in field of study. Hence, the technique makes the processes of data collection easier, quicker and more reliable. The technique also provides the investigator with ability to concentrate on the particular case in the natural environment without any change and record the events within the conditions of the setting (Griffiths, 1995).

The researcher applied this tool in order to gain field data and generate knowledge about the newsroom setting. The researcher attended as an outside observer to monitor the activity of journalists and workers in the newsroom. The researcher observed the behaviour of both individual journalists and groups. The researcher determined which workplace settings were best to conduct indirect observation.

Through the observation, the researcher looked at three key workspaces and settings in the television station: the *newsroom*, the *studio* and the *control room*. The researcher attempted to describe the human relationships within the social network and the structure of the news practice setting. Also, the indirect

observation technique provided the researcher with a logical framework to understand and recognise key elements in the context of the research field, such as who was involved in the newsroom activity, where the action was and what were the goals. Daily attendance gave the researcher the ability to recognise the key aspects of the news practice by focusing on the when, how, who and where of the news practice in the newsroom.

The researcher's experience in the field of journalism and news practice provided the ability to obtain a considerable understanding of the journalists' practices, for example, the sharing of goals, exchanging experience, learning together, acting as a team and dealing with new technological tools. The researcher looked closely at a range of social actions chosen randomly in the workplace settings. Moreover, the researcher observed the work in shifts during the week and at different times of the day, the morning, afternoon and evening time. Additionally, the researcher looked at the key characteristics of the journalists, for instance, their age, skills, experience, ability to work, speed of work and their qualifications. Consequently, this helped the researcher to derive a logical explanation for the situation of newsroom practices.

Another aspect of the observation processes was focusing on the key technology equipment that is involved in the processes of news production in the automation and non-automation settings (in particular, in the newsroom, control room and the studio room).

Additionally, during the process of data collection, the researcher used a video recorder to highlight some actions that happened during the workplace circumstances. These aspects provided the researcher with work for accuracy and a better understanding of detailed notes around their behaviour in the field of news operations. Also, the researcher took a series of pictures during work time, for example of group sharing, making decisions, teamwork, the use of storyboards, the news schedule, chatting times and journalists' tasks in the environment. In this manner, the tool provided more opportunities for determining essential aspects of the newsroom practice and community.

6.4.2 In-depth interviews

The in-depth interview is one of the most essential forms of qualitative interviewing, frequently used in the context of ethnographic studies. This type of interviewing is known as an unstructured interview (Edwards and Holland, 2013). Ritchie et al. (2013) argue that 'in-depth interviews are a powerful method for generating description and interpretation of people's social world' (Ritchie et al., 2013, p.178). This technique is used to obtain an understanding of the participants' perspectives in particular situations. This tool provides the researcher with the ability to develop their ideas and gather knowledge of particular human behaviour in the newsroom as a workplace. Therefore, the unstructured interview can be described as a systematic method for gathering data and detailed information (Schensul, 1999). Through the conversation between the interviewer and interviewees, the researcher was able to gather and produce knowledge on the issues under study.

Through conversation, the ethnographic researcher was able to gain information and data on the newsroom workplaces, journalists' behaviour, goals and the features of the social world of the newsroom more generally (Weiss, 1995). During the non-participant observation phase, the researcher was able to discover many essential aspects related to the topics that were selected for the interview (Monette, et al., 2013). Also, the main characteristic of the in-depth interview is that it provides interactions between ethnographer and the interviewees. In this way, the interviewee have opportunities to explain their ideas at length to each other. The interviewees expressed freely in their own words their experiences in the newsroom and told the interviewer newsroom stories. The researcher was then able to discover the meanings of their experience, knowledge, information and everyday life practice (Gregory et al., 2009). The key purpose of conducting the in-depth interview is to obtain individual and personal feelings of the participants' everyday lives and situations (Bailey, 2008).

Table 6.1: The participants in the in-depth interviews according to the workplace and channel

Procedure of interviews based on the workplace		
Newsroom	Control room	Studio room
News producer	News director	News anchor
News editor	News producer	
News organiser	Switcher vision mixer (director)	
News interpreter		
News reporter		

Table : Total interviewees in KNN and GK Channel

KNN channel		GK channel	
Numbers	Type of people	Numbers	Type of people
3	News producer+ news organiser	3	News producer
2	News anchor	2	News editor + news interpreter
2	News director	1	News director
1	News reporter	1	News reporter
1	Archive person	3	News anchor
2	Copy editor	2	Archive person
2	News editor + news interpreter	2	News art
2	Art and graphics	1	IT person

15 total interviewees in KNN	15 total interviewees in GK
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The key aspect for choosing the unstructured interview approach in this project, was the flexibility of the tool. This provided the researcher with the ability to deal with the content of the conversations, ask the interviewee questions and listen to what they said. This tool is key for the process of data collection, in particular, to develop an in-depth understanding of the cultural and phenomena under study (Holloway, 2005). The unstructured techniques provide more validity to the content of the interview, in comparison to a more structured interview (Bailey, 2008). Another benefit of the open-ended interview or qualitative interviewing is that the participants provide more detailed answers, rich information and a wide range of qualitative material on the question. Also, this type of answer is less one-directional and reduces bias because the interviewees have been provided with the choice of replying (Covington, 2008). Also, this technique provides the participants with a free space to express their ideas and knowledge. The techniques and tools encourage the interviewees to be more honest, provide true answers and be relaxed and more comfortable in responding to answering the questions (Ferrante, 2012). Additionally, this type of interview creates a conversational circumstance for the researcher to explain the topics of the interview using a familiar vocabulary and open-end questions and excluding informal discussion (Wilson, 2013).

The researcher carried out in-depth interviews (*see appendix 4*) with the participants between December 1th 2013 and January 10th 2014. The unstructured interviews were mostly conducted with the community members of the newsroom, for example, the news producers, news directors and news editors.

The researcher directed the unstructured interviews in the workplace face-to-face, and the average of each time period was between 15 and 30 minutes. Also, several interviews were very short, about 10 minutes, because the ability of interviewees to speak was limited as well as their skills to express themselves at times. The researcher carried out 15 interviews from each of the channels. This

number of workers participated in the qualitative interviewing to ensure all aspects of the newsroom practices were covered. The researcher carried out all of the interviews with workers on the same day in a different sitting and time, one by one. The researcher had already prepared the list of relevant topics relating to the research framework in order to ask the participants questions. Additionally, the interview environment was good and allowed a full discussion with interviewees, which, in turn, provided the researcher with the opportunity to obtain more knowledge of news practices and activities.

Usually, the researcher used the open-end question format in order to create discussions with interviewees on their practices and how they dealt with new automation system or non-automation system in the workplace. The researcher provided opportunities for the interviewees to express their stories by using their own words in simple language and by sharing ideas, in order to reveal more about their everyday routines in the newsroom. The researcher focused in particular on the change that happened during their duration as employees, their work skills, their relationships in the community and their ability to deal with the new system of work or non-automation tools.

There were specific concerns for the researcher at the time of the conducted interviews, particularly in relation to some of sensitive or personal aspects. For example, the monthly budget of the news channel, the monthly salary of journalists and the sponsors of the channels. The researcher avoided asking any questions about these subjects in order to manage the collection process in a culturally and professionally sensitive manner. Also, A recording of each interview was made and saved it on the researcher own computer. This meant that less staff was needed for filming, recording, etc. It also meant that the interview was less formal in order to make the participants more relaxed. In terms of the duration of the interviews, it varied between participants, but usually each one lasted between 15 and 30 minutes.

The interviews were conducted at a suitable time for the newsroom staff. There was effective interaction between the interviewer and the interviewees about the newsroom practice topics. This was most important because some subjects

were not quite straightforward and clear for the participants. Thus the researcher made sure to explain such issues in the most suitable way. Also, he provided further information about the questions and key ideas to be discussed in the interview in order that the participants fully understood the requirements (*see appendix 5*). Thus, the relationship between the investigator and the interviewees was based on the experiences of the researcher in dealing with the participants for obtaining information about their everyday lives.

6.4.2.1 Transcription

The process of transcription of the in-depth interviews was the most essential part of the data collection operation. The researcher transcribed the interviews the same day as conducting the interviews, whilst staying in Kurdistan. The key purpose was to conduct the process of checking each piece of information and to cover the areas under investigation. The researcher transcribed the qualitative interviewing using Microsoft Word. The process of transcribing the voice interviews took more than three hours. During this time the researcher worked in a professional environment, to avoiding distraction, double-checking information, repeating phrases (including stutters, non-verbal communication and pauses) and double-checking the audio. The researcher attempted to avoided literal translation into English for the interview quotations, however, the researcher used nearest words or phrases close to standard English, in order make the text more understandable for the reader.

6.4.3 The documentation

During the field visits, the researcher had chance to gather and access several types of documentation for both channels. This aspect includes gathering internal documentation in both channels, includes:

- The timetable of work
- Daily schedules of work
- Draft of meeting
- Annual reports

- News ethical guide
- News stylebook
- Work policy
- Administration report
- Guide of work
- Instructions for the news chief
- Project proposal to develop the newsroom
- Activities report and the daily signing-in of journalists

Additionally the researcher gathered some external documentation including research the, organisation reports, textbooks and articles surrounding both channels. This documentation provided additional information and knowledge for the project. The materials helped to understand and reveal more about the journalists' practice and social activities in the workplace. In some cases of these documents, for example some point out how the journalists think about develop newsroom practice and news production within each channel. This information could not be shared with the public. In summary, these documents have helped and provided extra information supporting the primary data collection methods and process to explain how journalists conduct their practice and activity within the newsroom network. In the same way, the documentation and resources were available for the researcher in both channels, comprising two main types of unpublished and published documents.

6.5 Data analysis and grounded theory

This research applied a broadly grounded theory approach to the analysis and interpretation of the data gathered by the ethnography tools. As Charmaz claims, 'grounded theory ethnography gives priority to the studied phenomenon or process' (Charmaz, 2014, p.22). This method provided the researcher with the ability to generate descriptive and inductive qualitative analysis to construct theory through drawing on the practical steps and inductive features of grounded theory. This study also draws heavily on ANT and COP. As a result, the analysis mixed inductive aspects of discovered information with deductive

confirmatory aspects. This section provides information on this stage of the data analysis and key topics related to the research question.

6.5.1 Analytic process

After transcribing the audio records of the qualitative interview, the data was transferred to visual sheets and documents. In this phase, the researcher continued to make the documents ready to read by converting them to Microsoft Word. Then the researcher began the process of reading and re-reading in order to code the interview transcription documents. This process included identifying the concepts, comparing, exploring, examining and categorising. The next stage was the axial coding, where the researcher attempted to identify the key concepts and phrases in the context of the study (Babbie, 2015). The following steps advance the process of grounded theory in order to analyse the key categories and determine the connection between essential categories and other categories (Oktay, 2012). Through this process the researcher obtained a detail understanding and knowledge of the transcript documents. In summary, the grounded theory approach provides more systemic inductive procedures in order to analyse the data and develop analytic explanations of the data (Heppner et al., 2007).

The first stage behind the transcription of the content qualitative interviews was the reading process, whereby the researcher was able to obtain a first impression and create notes from the information visual sheets. This process took one or two readings to get a full understanding sentence by sentence (line by line). The final stage included the process of designating relevant words, concepts, phrases and themes. The researcher also needed to find the connection between a number of the words or highlighted actions, ideas, tasks and human activities, which were selected in the visual transcript sheets for the indexing process. In this way, the researcher attempted to find the most important repeated concepts in order to make group or sub-theme categories. This was undertaken in order to determine the variables that helped the researcher to understand the content of the interviews. Subsequently, the researcher used a computer program to conduct the process of selecting the

concepts and categories. Through PDF editor X, the researcher was able to read and conduct the editing of the data transcription. This software is a useful tool for research coding and to use as reader and write notes on PDF files sheets.

Although influenced by the practical steps of the grounded theory approach, this study draws upon key theoretical ideas from ANT and COP. Therefore, during the process of selection, the choice of the key themes was influenced by theoretical concepts such as newsroom practice, the COP and key aspects of ANT approach.

6.5.2 Display of the analysis in narrative form

The present of the analysed data from the visual transcript documents is built on the themes and the research questions. Also, the procedure came about by illustrating analytic data, which represented the themes, and then by using the quotes from the transcripts to support the sub-themes in the framework of this section. In this phase, the researcher tried to gather as many relevant quotations or phrases as possible to support the analysis from the documentation. Also, the researcher attempted to provide a short interpretation of each theme.

6.6 Conclusion

This chapter has demonstrated the research methodology and methods that are based upon the ethnographic case study. The qualitative approach has been chosen in order to examine the impact of new technology on news production in Kurdish news channels. In the context of the present research project, the researcher used three key methods in the data collection process: in-depth interview, observation and documentations. The researcher conducted the in-depth interviews with the newsroom practitioners in order to understand the situation of their news practices within their workplace. In addition, the researcher gathered documentation related to key aspects of the study, in particular, related to the journalists' practice, community, identity, skills, experience, tasks, relationships between newsroom members and use of

technology. The next two chapters provide detailed accounts of the two newsrooms, KNN and GK, based on ethnographic observation and analysis.

- Thesis has used an ethnographic approach.
- Both ANT and COP are reliant on thinking an ethnographic approach.
- Selected two key case studies (GK and KNN news channel).
- In both cases the project undertook: 1.non-participant observation, 2.in-depth interview and 3.documentation.
- Analysis mixed an indicative approach based on grounded theory but also employed key ideas from ANT and COP.
- Overall 30 interviews, observations and at least 200 documentations in both channels.

Chapter Seven: Analysis of the data, the newsroom of the GK channel

7.1 Introduction

This chapter illustrates how journalists conduct news production using the non-automation system of the GK channel. Within this chapter, the researcher will attempt to explain news practices, observe journalist behaviours, analyse documentation and explain the responses from news workers. This chapter will also explore the essential aspects of the newsroom network production by illustrating how the data and findings link the news practice and structure of the network to key ideas from ANT and COP models (see, chapter, 4 and 3).

This chapter has thirteen sections that focus on the analysis of fieldwork data around news practices and news production network in the GK newsroom. The chapter discusses and illustrates the key aspects of newsroom practices from both the COP and ANT perspectives. As noted in the data was gathered using of different methods, including the in-depth interview, observation and documentation.

The first section considers how the journalists understand their news practices in the context of both the ANT and COP models. The second section focuses on GK's newsroom technology context. The third section the role of the news producer as an example of a *focal actor* (ANT) within the newsroom activity and key aspects related to their news *practices*. The fourth section then discusses the *human and nonhuman relationships* (see, chapter, 4) in the newsroom and the fifth section looks at the role of training courses as an important part of the *learning process* of COP (Wenger, 1998). Section six discusses the situation surrounding the news editors as an example of a *human actor* in the newsroom. Section seven will look at the professional skills of journalists in dealing with news practices in the workplace and explain how this aspect is key to how they obtain their work *identity*. Section eight concentrates on the skills of journalists in dealing with footage, news stories, production form and how these skills and

processes create artefacts. Section nine concerns the everyday life, discussion and *negotiation of journalists* (see, chapter, 3) in order to reach the *key goals* of the newsroom network. Finally, sections look at data related to the everyday news practices. Overall, internal structures of the news workers position in the GK newsroom (see, diagram, 7.1).

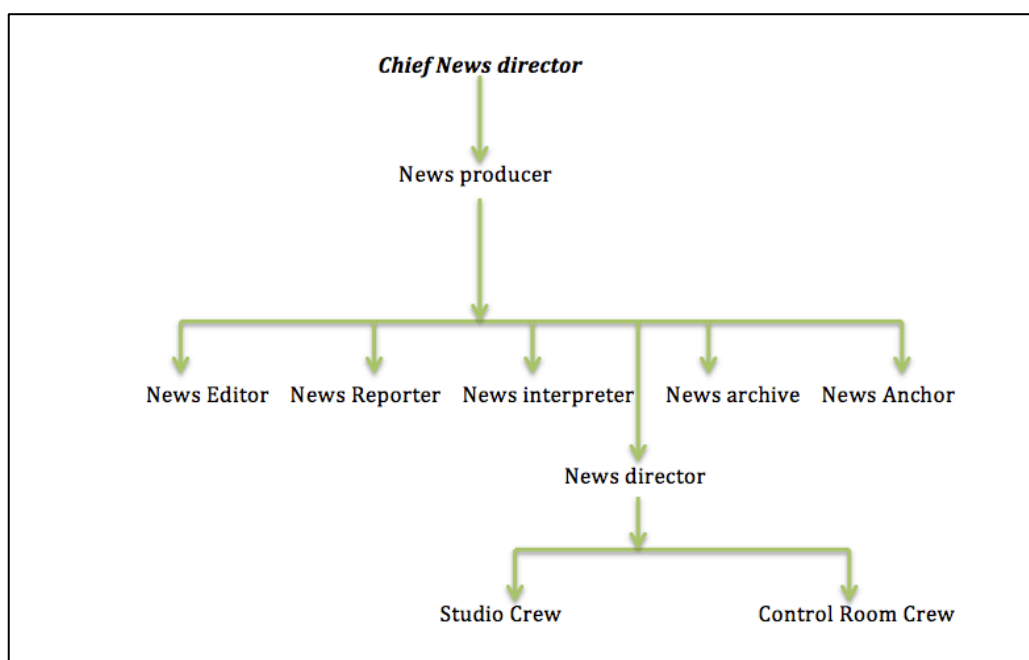


Diagram (7.1) structure of GK newsroom

7.2. GK newsroom's technology context

Journalists have a role in designing news programmes and shaping news production by using news tools. This means the process of production is a combination of human and non-human actors. In this context, Howcroft and Trauth (2005) argue that the actor-network is interconnecting amongst human and non-human actors (heterogeneous actors) who create the form and shape of things. The characteristic of connection between both actors provides the community network with a system of determining the shape of the newsroom practices; the procedure of newsgathering; the process of writing; decision making; gatekeeper roles; network powers and the news-making process.

Hence, the key human and non-human elements of the non-automation system associated with the procedures of news production workflow.

The researcher discerned that the GK newsroom uses video technology equipment and partly digital tools but not full digitisation. For example, they use wall video display technology in the news studio as digital equipment. The researcher noticed that the news editor has a problem in selecting footage and pictures for this display screen and playing it at the time of news presenting. Also, the researcher observed that the journalists have a lack of skills and experience in dealing with this integrated interactive news tools in the newsroom, for instance the treatment of many aspects of news presenting by providing additional information and attempting to engage the audiences in the news programmes. The researcher believes that this aspect of the news production workflow has been neglected fully by the news crew in the GK newsroom. The news producer in GK Channel, regarding the display screen, states that:

‘...The selecting of video footage or images for the screen is constructed on the timetable of the news programme. For example for the long distance events, we use video footage related to the news stories and in the short news, we just use pictures to refer to the news events. The news producers regularly decide which pictures and video footage are suitable for the wall display technology by involvement of the news editors. Sometimes, the operators of the wall screen put on the video clip or the news image. There is often opportunity for choice concerning the pictures for displaying on the interactive screen in the studio news’.

(Translated by: Abdulsamad Zangana) (NP, GK)

زوربه‌ی کات فوتو بو ول سکرینه‌که داده‌نریت به‌لام نه‌گهر فایل یان حقیبه هه‌بیت نه‌وه ده‌کریت به فیدو . بو نمونه هه‌ندی رووداو دوور و دریزه و کاتی زووری ده‌ویت له کاتی په‌خش بویه ئیمه په‌نا ده‌بینه بهر به‌گار هینانی فیدو بو ول سکرینه‌که. سه‌رنوسه‌ری هه‌وال بریار ده‌دات له سه‌ر دانای فیدو یان فوتو بو ول سکرینه‌که. کاتیکش سکریت ته‌واو بو نه‌و ده‌دریت به‌و که‌سه‌ی که کاری ریکخستنی فوتوی ول سکرینه‌که‌یه . نه‌وش به پی هه‌واله‌کان وینه و فیدو ریک ده‌خات بو سه‌ر ول سکرینه‌که. زور جار سه‌رچاوه‌ی وینه‌کان خودی هه‌واله‌که ده‌بیت یان هه‌ندی جار ئینته‌رنیت ده‌بیت یان له ریگه‌ی دوبلاژی هه‌واله‌وه وینه‌کان ستیل ده‌کریت.

The work system in the GK newsroom is based on the non-automation system format. The GK newsroom system is less interactive and the application does not have much flexibility for the journalists to communicate, stream assignments and manage the content of news packages in a professional manner.

The researcher observed that the editorial operation is grounded on the use of PCs as tools to edit information without seeing the news video footage. The researcher noticed that this aspect creates many practical challenges for the journalist, in managing their assignments and news production workflow. In this context the news producer in GK Channel argued that it is necessary to improve the GK newsroom system in order to work better by using new automation system and building a professional group/team (NP, GK).

Instead of an automation system, they have another piece of software called "FileZilla" supports rapid FTB and SFTP. This software is an open source project and free download, which they use to transfer video files as a standard network in the newsroom. Through this software, the journalists are able to transfer the video file to another place within the network, for example from the newsroom to MRC, or from GK's offices in other cities to the hub of the newsroom (S-IT of GK). This type of software does not allow the journalists to conduct editing on video footage and change the content of the news package as an editorial aspect of a story. The journalists are only able to use the software to watch footage and transfer a video file within the workplace network. In context, the news workers in the GK newsroom, they could not access to email,

group work tools or conduct discussion board that based on the technology network.

As an example the researcher observed that there are many news workers within the GK newsroom who play a big role in processing of news items, for instance the character generator operator (CG) is one of the most indispensable human actors who is involved in the operation of news production, particularly in dealing with visual aspects of the news story in the control room. The researcher observed the key tasks of the CG operators in the production workflow in the workplace, which involves him/her in fixing the news title, news rolls, animated text and video streams. However, in the GK newsroom the CG operator uses PowerPoint software and Microsoft Word to create news scripts and deal with their tasks.

The participant in their interview highlighted the role of the news graphics designer in the frame of news production in the GK newsroom. However, in the GK newsroom the graphics elements were not available for the news content.

‘...the information graphics are not available in the news programme. The reason for this is the costs of producing news graphics and providing professional crew in the channel is too high. We rarely use simple graphics in our production’.

(Translated by: Abdulsamad Zangana)(NP, GK)

گرافیک بوونی نییه له ههوالدا . هوکارهکەشی ئەوەیە که ئیدارەى کەنالهکە دەلیت گرافیک پارهیهکی زوری دەوێت ، کهم شت ههیه له ههوالی ئیمه دا دهکریت به گرافیک به تهواوی گرافیک پشتگوی خراوه ئەمەش بیگومان به هوی نهبوونی ستافی باشی گرافیکه له کەنالهکە.

In the context of news production workflow, the key strategy of GK Channel is providing 24/7 news operations. The key policy of GK news production has concentrated on coverage from various news programmes around the Kurdistan region, Iraq, regional Middle East and the international community. Also, the GK Channel news programme includes political news, economics and sport and weather by services in the Kurdish language (both Sorani and Krmanji

dialects). This action within the newsroom network requires more facilities and automation of the newsroom system in order to produce good quality news packages and construct a more interactive environment amongst the journalists to coordinate in the network.

7.3 The understanding of news work

In terms of the COP Model, Wenger (1998) emphasises that the identity of members is a primary element, which is key to conducting the same practice in similar workplaces. In this way, the members should have an understanding of their practices in order to obtain their identity within the community. Also, in the framework of the ANT, the social context of the practice is a key component, especially in the translation phases. The members should accept the focal actor's aims and follow instructions. In the newsroom, the news producer is an example of a focal actor, in this way; the focal actors represent the newsroom network's interests and goals. This means that the members of the community should have full understanding of their practices, tasks and goal, and also, agree to follow the news producer.

Both ANT and COP models emphasise that human actors should have an understanding of the community goals and practices in order to sustain an appropriate identity within the community. In this context, the researcher observed that the journalists have problems in dealing with some components of the news packages and understanding the expected shapes of the packages. For instance, the researcher observed the news editors editing a news item in the GK newsroom. One of them was unable to organize the information to the matching footage of the story. The researcher also noted that the workers at GK had limited understanding surrounding their news tasks. For example, they may not know enough about the video footage of news stories. The researcher believes this is related to the journalists' level ability and skills in using the non-automation system in their news practice.

In a similar regard, the news producer in their project proposal, '*Change and development of news practice in the GK, 2012th*' (see appendix, 3) for the administration of the GK newsroom, identified problems with many elements of the

newsroom. For example, the evidence that the news producer required exclusive training courses to gain knowledge, improve their skills, learn how to coordinate between news elements and also, to understand their assignments in an appropriate way.

The researcher discerned that in the GK newsroom, especially in the field of newsgathering, the journalists face many problems and barriers to practising their tasks. For example, the researcher observed that the news reporters had a lack of skills in dealing with piece to camera and in providing explanations around items for the audience. With regard to this, the news producer in the GK newsroom responded that news practice and academic colleges do not equip journalists with all of the skills to work efficiently. In this way, he claimed that the GK newsroom has a limited number of professional news producers and some of them have a lack of key skills. During the interview, he commented that this impacted the news practice and the quality of the news production in the channel (NP, GK Channel). The same news producer commented in his interview that:

‘...The news producers learnt, their practices in the field of news production, by themselves through hard work and struggle to realise their practices. This is the biggest barrier that news practitioners in our channels are facing. The journalists that come to work here have not gained their knowledge and experience by the study at university or media college. They do not have enough skills, understanding and knowledge to practise their daily news routine in the newsroom. Thus, in the GK newsroom, we have a limited number of talented workers and limited human resources’.

(NP, GK Channel)

هه‌والساز یان به‌ره‌مینه‌ری هه‌وال منتج الاخبار له ناو ته‌له‌فزیونی گه‌لی کوردستان که‌می ژماره‌یان یان به‌ تایبته‌ له‌ سه‌رجه‌م که‌ناله‌کانی تری راگه‌یاندن. هه‌روه‌ها زانکوکان نه‌یان‌توانیوه‌ کادیری شاره‌زا به‌ توانا دروست بکه‌ن.

ئه‌م چه‌قیقه‌ته‌ بویه‌ ئه‌و هه‌والساز و به‌ره‌م هینروانه‌ی هه‌ولانه‌ی که‌ له‌ گه‌یانده‌ها هه‌یه‌، زیاتر به‌ توانای خوی خوی پی‌گه‌یانده‌وه‌ . فیری هه‌وال و هه‌والسازی بوون . ئه‌مه‌ش بو خوی گرفتیکی گه‌وره‌یه‌ رووبه‌رووی ئیمه‌ ده‌بیته‌وه‌ . ئه‌وانه‌ی که‌ له‌ زانکوکانی‌شدا ده‌خوینن زور فیری بواری پراکتیکی ناگیرین. بو ئه‌وه‌ی له‌ مه‌یداندا ده‌ست به‌ کار ی بکه‌ن. له‌ که‌نالی گه‌لی کوردستان توانه‌یه‌کی که‌می مروی هه‌یه‌

The researcher observed that the journalists in the GK Channel face barriers in shaping the news packages and plan to cover news reports. For instance, the news reporter lacked the skills in making a balance, between content, visual elements and natural sound of the story. The researcher also noted that the workers do not participate in workshops, which are designed to improve their news practice skills and obtain a full understanding of news practices. In both ANT and COP models, understanding of human actors of the social world is an essential part of the practice and the social activities in the network (see Laboratory life example, chapter four and Wenger's concept COP, chapter three).

Regarding the journalists' understanding and knowledge related to their domain of practices, the news producer, in a short discussion with the researcher, critically stated that the system of employment in GK Channel is not based upon a consideration of eligibility for news practice or based on an application and CV (NP2, GK). To explore this aspect, the researcher put short questions surrounding the careers system to the workers during their time of work. They emphasised (in their responses) that the GK Channel does not base its decision of employment on testing the newcomers' ability or on the job application/CV or on examining their experience in this area. Hence, the researcher detected that one of the reasons for the journalists' lack of understanding of their news practice is connected to the system of careers and others linked to the non-automation system in the GK newsroom.

The researcher observed that some of the news editors in the GK newsroom have a lack of knowledge in dealing with the process of news editing and writing. For instance, they were unsure of the best language of writing a news story, skills of choosing the best words, phrases, simple sentences and short sentences to television, to write up the news story. The researcher observed the journalists have challenges with applying a simple style of writing and matching news information with footage in the news item. For example, the researcher observed the way of shaping and combining the words to the pictures in news items did not compliment each other in the package. In his interview, the news producer argued that the journalists in the GK newsroom have different levels of skills and understanding in relation to the news writing and their news practices (NP1, GK).

The fundamental aspect of news practice is writing to footage. This element provides the journalists with more knowledge and understanding surrounding their practical work. The researcher noted that the journalists need talents in organising the footage within the news story. For instance, the news editor has to deal with these two elements in a separate way. The researcher also monitored the journalists' responsibilities in dealing with the news information, news footage, sound bites and voice-overs, some of the newcomers' neglect of these aspects of the news story. With regard to this aspect of news practice the news producer in the GK newsroom stated that:

'...The news producers or the news writers do not deal with the news footage, these aspects are more relevant with the footage editors' tasks in a different room. Usually, the editor's pictures or the cameraman have the responsibility to choose and take the right footage for the news stories. They have experience to organise the visual aspects of news'.

(Translated by Abdulsamad Zangana) (NP1 GK)

ئەوانەى كە پەيوەندى كىردووه بە بەشى ھەوالەو ھەك كىرمەندى ھەوالساز كارى كىردووه ئەو تەنھا
مەصور و مونتىر زىاتىر ئەزمونى پىش وختىيان ھەيە لە بوارەكانى خويان واتا ھەوالساز ئەزمونى
كەمترە لە سەر وىنە ھەيە.

The researcher observed that the image editors only deal with the video footage of news stories and organise the shoot, such as the graphics, still pictures and maps in a logic frame without thinking about information. The researcher also observed the preparation step of editing and the process of ingesting rushes. The news footage editor neglected this step and left the ingesting items into the computer until finishing. Then, the footage editor went back to work on the shots without watching this process and has no idea about shots. The researcher realised that the key task of the image editor is based on computer editing function software such as Final Cut Pro and Adobe Premiere.

In this context the news producer argued that the footage editors must have the experience and knowledge in deal with the editing operation, particularly in relation to the shots, sequence and news footage (NP2 GK). The researcher also noted that the footage editor has the specific task of dealing with the image editing without thinking about matching footage with information. For example they conduct their job without writing a short list of shots or storyboard for the story.

The researcher noted the journalists had lack of experience in dealing with news editorials and the content of news stories. For example, applying the basic principle in the writing of news content, such as inverted pyramid writing. Previous studies have shown that the journalists in the GK newsroom deferred to their fellow workers in conducting their practice, especially to choose the form and content of news stories. This means that there is same discrepancy in the thinking of individual journalists within the GK newsroom (Abdullah, 2008).

The news reporters have a vital role in the news hub, especially in the GK newsroom. Sabir, in his work (2011), points out that the GK Channel mainly depends on the news reporter in the process of newsgathering and then the news agency. The researcher notes that the news reporter in the GK Channel

has a lack of skills in regard to news report production, for instance storytelling experiences, shaping news reports, the function of shots and understanding which elements makes the high quality news. Also, the news producer responded critically and negatively regarding the role and task of news reporters in the GK newsroom. In particular, he commented that the news reporters have problems with understanding their tasks correctly and using the right equipment and good techniques during production. This is shown below:

‘...The key problems of the news reporters outside of the GK newsroom are relevant to many elements, such as, they do not have full understanding of how they edit the information, pictures and sound bites, towards putting them together into one package. They have less experience in treating news matters and in dealing with the ideas of news topics.’

(Translated by Abdulsamad Zangana) (NP, GK)

گرفتی په پامښتې د درېوې شرمې هېه . نهمه ش به هوې نهوې شاره زای ته وایان نییه له
چونیتې بهرهم هینانې هوال و راپورت . هندی جاریش تا ناستیک که هیچ شاره زایان نییه له سر
چونیتې چاره سرکردنې بیروکه ی هواله که.

The researcher observed that one of the problems faced by the news reporter when in the editing room was dealing with the feed coming from outside of GK central. The researcher realised that the news reporters are inexperienced in dealing with the shape of news items, including, making clear the strategy of coverage, organising footage, creating storyboards and matching footage with information.

In this context, the interviewees responded that the news producer has to face a barriers and additional workload in the GK newsroom, specifically in dealing with matching footage to the news information and fixing of others’ work. The interviewees noted that the journalists in the GK newsroom suffer from a lack of skills, understanding, editorial knowledge and thinking visually about news stories. Furthermore, the news producer stated that the GK Channel does not

have a training scheme to improve the journalists' skills with regard to the development of their visual experience (NP, GK).

The researcher noticed that the newcomers to the GK network have different levels of understanding of relevant news practices. For instance, the researcher found that the journalists were inexperienced in editorial were dealing with the interviews in their in-house report, effective mutual engagement with other news crew members and in general newsroom culture. In relation to this the news producer in the GK Channel commented in his interview that:

‘...We provide the newcomer information about their tasks. Also, this aspect is based on the skills of the new journalists and to what extent they have an understanding about the newsroom practices. As a news producer, we prefer the workers that have a full understanding and experience of work. However, I see that the newcomer in this channel does not have more experience about the news work. Further, this part of news practice in GK depends on the system of employment and career plan.’

(Translated by Abdulsamad Zangana) (NP2, GK Channel)

هاوکاری کردنی کارمندی نوی دهکویته سمر ناستی شارهزای نهو کارمهنده تا چی نهاندازهیهک نهوه
کارمهنده شارهزای له کاری ههوالسازی له ناو نیوزروومدا ههیه . من وهک سهرنوسهر ههمیشه چهز
دهکهم کارمهنديک بیت شارهزای تهواوی ههبيت له کارهگهی به تایبته له ناو نیوزرووم دا . بهلام نیمه

به پیچهوهانهوه ههمیشه رووبهرووی نهوه دهبینهوه که کارمهنده تازهکان بی نهزمونن نههمش به
هوی سیستهمی وهرگرتنی کارمهندهانهوه لهم کهناله . نیمه پیویستمان به کامهندي حازه واتا بیت
راستهوخو دهست به کار بکات نهک نیمه فیری بکهین .

The researcher observed that the newcomer to the newsroom had a lack of understanding and knowledge surrounding their new environments, in particular how they deal with the news sources, footage, information, the creation of news reports and interacting with people within their workplace.

On this basis, it can be said that the journalists in the GK Channel suffer from a lack of experience and understanding in dealing with the newsroom practice. This has a negative impact on their everyday practice and news duties. Hence, this influences the quality of news production and makes the newsroom network unstable, according to ANT criteria and Wenger's (1998) characteristics of the COP model.

7.4.The news producer in the newsroom

The television news producers are bound to work with other members of the newsroom network. According to COP and ANT approaches, the news producer is an example of a *community leader* or a *focal actor* in the context of social practice. Through this position, the news producer is able to create the system order of news practices in order to ensure stabilisation of the newsroom production (Latour and Callon, 1981) and put the news packages in a suitable order on the rundown list. With regard to the news producer in the GK newsroom, the researcher remarked that the news producer has a key position and role within the newsroom and has a great deal of authority to manage the news package. The researcher observed the news producer attempt to ensure everything related to the news package was well developed in the case of coverage of a government's project decision. In this aspect, the news producer communicated with the other news crew, such as news reporters for information, the news editor for the footage, news graphic designer and news anchor to obtain information-surrounding the presentation.

In relation to the role, there are problems and issues for the human actors in the GK newsroom. The news producer in the GK newsroom argued that the news crew in the newsroom has a limited number of academic and professional workers such as the news producers, the directors, news editor and footage editors (NP, GK). The researcher observed that the lack of professionalism of news workers and the news producer in the GK Channel has impacted directly on the news productivity. In the same aspect, the news producer in his interview also commented that:

The researcher also observed that many issues arise in relation to the transmitting of live events by Satellite News Gathering (SNG). For instance, the editing videotape tools and video player within the non-automation system, usually with damaged stock and the devices not working well. Further, the researcher noticed that the news practice within a non-automation system creates problems for the journalists. For instance, the challenge of searching for video archives in using the old system of coding and updating news stories (visually and content). Hence, this aspect makes the news practices slower and high cost to the news station.

According to the ANT and COP approaches in a well functioning newsroom, the journalists should have full understanding of their practices and also accept instructions from the news producer. In the following quote from the news producer in GK, more information is provided in relation to understanding the situation of the journalist:

‘...One of the biggest problems in GK is the journalists misunderstanding the key goals of the newsroom, such as the misinterpretation of the news reporters to treat the topics of the stories. These components create issues for the news producer to control the news practice. Then, the news producers spend a lot of time trying to solve the problems and attempting to provide the journalists with instructions about the matter, especially, news reporters from outside the GK newsroom. These reporters spend a lot of time checking the material and reworking some items. The unskilled, less knowledgeable journalists have trouble in dealing with some aspect of news practices in other departments. Usually, this creates too much work stress on the news producers’.

(Translated by: Abdulsamad Zangana) (NP, GK)

ئەمەش وا دەکات سەرنوسەر کاتیکی زور سەرف بکات بو چارەسەری هەوال و راپورتی پەیامنیانی دەروەش شار بو چاککردن و باشتێ کردنی راپورتەکان ئەمەش بو خوی پالەپەستو زیاتر لە سەر ئیمە دروست دەکات. هەروەها نەبوونی کادیری شارەزا و لیھاتوو لە بەشەکانی تر کەمو کورتیەکی ترە بو نمونە : بەشی کاپچەر رووم : کە کاری بریتە لە ریکخستنی کاری پەیامنیان و و بەشی دوبلازی هەوال هەندی جار کامەندی وای لیبە وینە کەسایەتیکی سیاسی ناناسیتەووە قسە لە گەل سەرنوسەر دەکات بو دوزینەووی وینەکە.

کیشە بچوکان کاتی سەرنوسەر زور دەبات . یارمەتی سەرنوسەدات ئەمەش بە هوی کەم ئەزمونی کارمەندانی بەشەکانی تر .بیگومان ئەمەش وا دەکات سەرنوسەر کارە سەرکییەکە یی بچیتەووە و سەرھالی چوونیتی چارەسەرکردنی کارەکانی تر بیت چارەسەریان بو بدوزیتەووە.

In a similar manner, the researcher observed the news reporters have problems especially when they feed the footage to a central newsroom. In some cities news reporters have a double jobs – reporting and recording via camera the events. The researcher realised that this task makes the work of a news reporter stressful. Particularly when trying to organise all the news elements within one package. For instance, looking for sound bites, interviews, and information and shooting. The researcher detected that the news producer plays a key role in attempting to solve them. The researcher observed that the news producer would discuss with the news editor particular problems, for example how to recreate the news report with appropriate content. In the informal discussion between the researcher and news producer in the GK hub, the producer critically argued that the quality of the news items is not of a high standard and the news crew are not satisfied with the production. The news crew should feed-in a high level of news story content to the audience with good quality information, footage, graphics and audio. The researcher noticed that the key reason for this situation and its failure is the non-automation system in GK is that it does not provide the journalists with the necessary opportunities to understand their task and shape the production. In this context the news producer referred to key problems and the stress they faced in their news practice by stating that:

‘...We have a lot of assignments and responsibilities in the newsroom environments, particularly in dealing with the non-automation system. This creates many obstacles regarding our practice, for instance stress at work, which impacts on our production and requires changes in our schedule of news practice. Hence, the news producers or news workers do not care for the quality of news item and only focus on the accomplishment of their news tasks, which affect news services and the news production as well’.

(Translated by: Abdulsamad Zangana)(NP, GK)

سکرپتی هه‌واله‌کان ئهمه‌ش لودی له سه‌ر ئیمه که‌م کرده‌وه . هه‌ندی جاریش ئه‌وه‌نده لودمان له سه‌ر له کاتی پروسه‌ی به‌ره‌م هینانی هه‌واله‌کان وامان لی ده‌کات ته‌نها بیر له به‌ری گردنی کاره‌کان بکه‌ینه‌وه نه‌که کوالیتی کاره‌کان ئهمه‌ش بوخوی کاریکی خراپه‌.

The researcher observed that the pressure of the news producer’s practice has a negative outcome on the news production, for instance, the producers attempt to fix the news reporter item, calling the studio host to interview and giving instructions to the news editor to write up the final news headline. In a similar case, in his interviews, the news producer indicated that ‘the workload and time pressures are created by the news director department or administrator of the channel’ (NP interview, GK). The producer referred to some issues including, the update and adding of a new story on the rundown list, especially when they have a short time before a live broadcast in the station. This change creates too much stress and time pressure on the news crew, especially those involved in the news production (NP, GK). The researcher noted this problem in the fieldwork and the journalists have limited ability to conduct these tasks within the non-automation system, for instance the journalists being unable to access newsroom network from the field and provide news crew update information relate to the news story.

The researcher observed that in the GK newsroom the news producer as an example of a focal actor is involved in other tasks, for instance, the news editing

checks news process, adds information and monitors story footage. The respondent in the interview surrounding the news producer's work stress said that:

'...The news producer is bound to be involved in all duties regarding the newsroom network. The processes of the news-making operation include a manage of all news project services, for instance the news ticker or news crawler, the news stories' content, news report, in-house report, organising news programme (including the live interview, news feed in the field and editorial news item), and studio guest (1+1). The work overtime makes the news producer's tasks more difficult, stressful and complicated'.

(Translated by: Abdulsamad Zangana)(NP, GK)

ناچاری سهرنوسهر ههموو کارهگانی ناو نیوز رووم نهنجام دمدات بو نمونه : تیکهر نیوز بار و ههوال و راپورتی دهرهوه و راپورتی ئین هاوس و ریکخستنی دوسی و میوان بو بابتهگان. که نهمه بو خوی نهگرگی سهرنوسهر زیاتر دهبيت .

The researcher observed that the heavy workload in the network create a lot of stress on the news staff manager, as well as on the news producer. The news staff are unable to make decisions about a variety of action and work in the network's programme of activity. The interviewee had a negative opinion surrounding the situation of news work in the newsroom and discussed the work stress (NP, GK). In his opinion, he stated that the work stress inhibits the news producer from implementing the everyday plan and ideas in order to change and develop their news practice. He mentioned that the time constraint at work does not allow the journalists to make these changes in operations and prevents them from focusing on their own projects (NP, GK).

The news presenters are involved in the everyday news operations in the newsroom, especially, GK newsroom's 24/7 news operations. The researcher remarked that the number of news anchors in the workplace is less than the

number that is required for coverage of the news services. The news anchor in his interview commented that:

‘...the anchor news in the GK Channel is challenging, especially news practices based on the hour of work and the numbers of the news anchor are limited. There is no balance between the number of news anchors and the amount of news-making and news production processes in the newsroom, more particularly, the work at GK Channel is 24/7 news services’.

(Translated by: Abdulsamad Zangana) (NA, GK)

به رای من نیمه وهك بیژمرهكان ژماره مان پینچ كهسه ، ئەم ژمارهیه كهەم له چاو ئەو كارەى كه دهیكهین ، به تیبهت نیمه ۲۴ سهعات ههوالمان ههیه. ههموومان له ناستیكى نزیک له یهکین له رووی شارمزی بۆرای کارکردن .

The researcher observed that the news production in the GK newsroom has further problems, as the news crew are unable to cover this amount of production. For example, work on 24/7 news operations and too many news programs across a day. The researcher noticed that the channel had difficulty with using the non-automation archive system and saving the news material, which is fed in by the news agency. An automated and news storage digital system is not available in the GK newsroom network. This aspect they are unable to easily access the newsroom archive. The news archivist in the GK Channel stated that:

‘...we have registration with many news agencies and they feed us news information and footage frequently. However, we are unable to save, store and download the entire news item and footage, because of the high level of work demands on our department in relation to time constraints and fewer numbers of workers. Also, the archive system in GK is not available for news practices’.

(Translated by: Abdulsamad Zangana) (AP, GK)

زیاتر ئهخلاصی تورکی داوئلود دهکەین ، ناتوانین هه‌موو وینانه داوئ لود بکهین به پیویستی خومان
و هه‌واکان شته‌کان ئه‌رشیف دهکەین له‌م ئازانسه و هه‌روه‌ها کاتیکی زوری ده‌ویت بویه به شیویه‌کی
سنور دار مامه‌له‌ی له‌ گه‌ل دهکەین .

This creates consideration problems with coding and storing video materials. It also creates challenges when reworking materials. The news editor commented on the obstacle of news practices and everyday routine. He claimed that:

‘...As news editor, our daily tasks focus on the translation task from other languages into Kurdish, especially from Arabic language texts. Also, we organise and edit the news stories’ content. Daily work roughly includes twelve news item edits, rewrites, without mentioning the number of introductions that we make for events, or contribute to other news reports or make in-house news reports’.

(Translated by: Abdulsamad Zangana) (AN, GK)

ئیمه زیاتر وه‌ك هه‌والساز کاری وه‌رگیران دهکەین له‌ زمانی عه‌ربه‌وه‌ بو کوردی ، روژانه له‌ نو هه‌وال
بو دوانزه هه‌وال دروست دهکەین، ئه‌مه به‌دەر له‌ نویسنی پیشه‌کی راپورته‌کان ، به‌لام هه‌ندی حار
هه‌والمان ده‌ست ناگه‌ویت بویه ناچار ده‌بین خومان له‌ ریگه‌ی خویندنه‌وه‌ی روژنامه‌و ویب سایته‌کان
هه‌وال دروست بکه‌ین. من وه‌ك خوم که‌متر راپورتی ئین هاوس دروست دهکهم .

Therefore, it can be concluded that the newsroom in the GK Channel is an unstable network, especially in the news production process. Also, the non-automation system does not support the 24/7 news operations and news cycle, specifically for the news producer’s role in managing the network efficiently. It makes the news producer’s difficult and challenges. Further, lack of training is a key factor that makes production quality less than required. Other key issues of the newsroom are those of understanding of journalists in solving their news practices’ issues and problems. This aspect directly affected the organising of the structure of the action network, relationships, news production and also, shaping the newsroom network.

7.5. The relationship of journalists in the newsroom

In terms of COP's and Wenger's concepts, the relationship between members is a crucial aspect to building and maintaining the community (PMI, online, 2009); specifically, the newsroom has different types of relationships between journalists. Also, under Latour (ANT)(1990) argued that relationship have a variety of forms in the social network, for example the connection among human-human, human-non-human and non-human-non-human. The community members have everyday engagement and participation in social activities, in order to achieve the key goals of the network. Also, the journalists are attempting to build their relationships to manage their news production in an appropriate manner.

The researcher observed that the relationship within the framework of news practitioner assignments takes various forms and different durations in the mapping of the newsroom in the GK Channel. For instance, the type of relationships between the journalists, from pre-production stage to production stage, is different and there is a similar situation for postproduction in the newsroom network. Therefore, the researcher notes that the term of relationships of news practitioners can be long term, short term or immediately disappear from the network. This aspect is based on the role of journalists within the news production network. Further, the relationships of journalists in each stage of the news production could be different to the pervious step and required attempts to create new relationships in the network.

The journalists participate every day in social and news activities that occur within their environment, for example, the individual journalist attempts to build their relationships with other practitioners in group work. Through these connections, the journalists are able to control a wide range of their collaborative work, and provide space to exchange information, knowledge, new ideas and experience of practice (see COP, Wenger, 1998).

The news producer in the GK Channel mentioned that the journalists have mutual relationships and work together on newsroom activities (see Wenger,

1998). The opinion of the news producer in the GK Channel is seen in this following statement:

‘...The best way to manage your projects in the newsroom is to construct your relationships with other journalists. Also, you should be more sociable and companionable in conducting the news co-work and shared projects. Moreover, the news practices require creating more relationships with other members of the newsroom. Journalists without good relationships with their workmates are unable to manage their news projects efficiently’.

(Translated by: Abdulsamad Zangana)(NP, GK)

باشترین ریگه بو بهریوهبردنی کارمکانت نهوه پیویسته پهیوهندیهکه له سهر نهساسی هاوریتی بیت
چونکه نهوه کارمکان بهریوهناروات نهگهر له سهر نهساسی هاوریتی نهبیت چونکه نهوه کارمکان به
شیویهکی باش تهواو نابیت. لیرش لهم کهناله کهمتر لیپرسینهوه له کارمهند و کارمکان ههیه . نهگهر

The researcher noticed that the news practitioners have a set of group work strategies relationships and then desk-share tasks, in which there are three or more workmates together at one desk station computer. The researcher also observed that through this type of interaction the journalists have opportunities to create and maintain relationships and interact widely in the newsroom. For example, the researcher noted that the news editors join in the teamwork and talk with their colleagues about news stories that include two or three news workers. Also, the researcher found out that journalists' within teams attempt to construct relationships, for instance the development of relationships between the news editors' and news anchors in order to accomplish the news duties.

In this case, the researcher detected that the news anchor has an interconnection with other news workers (e.g. news crew) and non-human (e.g. autocue technology) actors in the context of the newsroom network (in terms of the ANT model). For example, the news anchors have direct relations with news producers and usually use the autocue system. This connection with the news anchors provides the ability to exchange ideas, ask questions, obtain feedback

and prepare live events through using SNG (see Virtual community, Wenger, 1998). Hence, the researcher believes this aspect of the actions provides the news anchor greater ability to manage their associations with the news crew. The news producer in the GK newsroom commented that:

‘...In the setting of the news program, we have news guests (1+1), which includes analysis about daily topics. The news anchor has an understanding about the subject, asking a question and they attempt to discuss this with the host to provide the audience with more information. Also, the news producer has a conversation with the news anchor in order to have a good sense about the topics. In some cases, the news anchor has information and knowledge about the matter of dialogue and the news host’.

(Translated by: Abdulsamad Zangana)(NP, GK)

ئەگەر هاتوو لە ناو گەشتیکی هەوالدا دوسی هەبو ئه‌وه پ‌ی‌ویسته هەموو پ‌رسیاره‌کان له ب‌ی‌ژم‌ری هەواله‌کان تی ب‌گ‌ینی ئ‌ینجا پ‌رسیار و ر‌ینمایه‌کانی پ‌ی ده‌ل‌ین و ه‌ه‌ندی جار‌یش خ‌وی متابعه‌ی ئەگەر مو‌تابعه‌ی نه‌بوو ئه‌وه خ‌ومان زانیاری پ‌ی ده‌ده‌ین له سه‌ر باب‌ه‌ته‌که به پ‌ی د‌وسیه‌کان ه‌ه‌ندی جار‌یش ئاماده‌کردنی میوان ئەگەر له ر‌یگه‌ی علاقه‌ته‌وه ئه‌ب‌یت ئه‌وه ئ‌یمه وه‌ک به‌شی ه‌ه‌وال . علاقه‌ات پ‌یش‌وازی لی ده‌کات پ‌یش ئه‌ستود‌یو.

The researcher noted that the news anchor's relationships with the news crew are based on their assignments and co-work in the workplace. For instance, the researcher observed the discussion between the news producer, news editor, news anchor and news director related to the news program.

The evidence in the GK Channel shows that the news producers request the administration to encourage the journalists to construct and improve their relationships in the newsroom. For instance, they asked the GK administration to support and promote the creation of social events or monthly meetings between the newsroom members outside of work time, but then they did not do this (GK, NP project). In this case the news anchor adopts their relationships directly with the news editor as a vital requirement of their everyday practice in

ئاگاداربوون له ههواله تازهكان ، به ههالهكاندا دهچمهوه . له سهرنوسهر ههوالهكان ومردهگرين ، له سهر ئوتو كيو ههوالهكان دهخوينهوه ، ههموو فهرمانكان له دهرهينهروهه ومردهگرين له كاتي نمايشكردنى ههوالهكان له كاتي پهخشی راستهوخو . ئهو بهرپرسي كارهكهيه له ماستهر كونترول رووم، ههروهه لاپهري سكریپت و ههوالهكان له بهردمان دانروهه بو ئهوهی ئهگهر خهلهل ههبوو له ئوتو كيوهكه ئهوه پهنا بهرينه بهر بهكارهينانی لاپهري پرنتركاوانی بهردهستمان.

The researcher observed that the news producer regularly, as an example of a focal actor in the GK, makes decisions surrounding the activities within the newsroom and how they are conducted, such as changes in the news scripts, adding new stories and selecting journalists to help others. The researcher noticed that the news producers coordinated with the news directors to discuss the changes in order to avoid any technical mistakes in the broadcasting operation.

In the GK newsroom, the researcher observed that the relations and friendships are fundamental in shaping the newsroom network. The variety of connections among the community members has impacted upon the procedure of exchanging information and experience with peers, and engaging in the social activities and in the context of the learning process (see Wenger, 1998). The researcher believes that the journalists have less interaction with each other in some parts of their tasks and in their co-work with the newsroom. For instance, the GK newsroom does not have a lot of teamwork and group discussion within workplace. The news producer in GK commented:

‘...The relationships between journalists in the newsroom have taken the form of work partnerships and collaborations between colleagues within those doing the news practice together in the same workplace. This means the relationship between GK’s journalists is established on the level of the understanding of each other and the kinships between them, as well as the levels of solidarity between the journalists in establishing friendships. However, this can cause problems for newcomers primarily when

they enter the newsroom. In this way, there are senior journalists attempting to help the newcomers in order to provide them with the necessary understanding and construct relations in their environment’.

(Translated by: Abdulsamad Zangana) (NP, GK)

بیریت له هاوریتی پاشان بو هاوریتی کارکردن واتا هاوریتی پاشان هاوکاری . نهگهر کهسیک هاوریتی نهبوو نهوه هاوکاری ناکریت ؟ بهلی هاوکاری دهکریت بهلام کهمتر هاوکاری دهکریت . نههمش بو خوی کیشهیه بو نیمه . نهگهر کارمهنديکی نوی بیته ناو کهنالهکهوه نهوه هاوکای دهکریت له لایهن کامهندهکانهوه یان کهسیک دیاری دهکریت بو هاوکاری کردن و پیدانی زانیاری بو راپهراندنی کارهکانی لهو ژینگه نوییه . ههندي جاریش کارمهندان چاو پوشی لهوه دهکهن که نهمه هاوریان نییه و هاوکاری دهکهن نههمش دهکهویته سهر کهسهکان واتا ریژهیه له کهسیکهوه بو پهکیکی تر دهگوریت .

The researcher notes that the newcomer to the newsroom has limited skills of news practices and they need more understanding of the new work environment, they are role as involved as more experienced journalists in the news production. During informal discussions with the recent employed news anchor, the researcher learnt that ‘rarely are the new journalists involved in the training courses’ (AN, GK). He mentioned that the news producer, the news director and news editor, co-operate in helping the newcomer adapt to the newsroom.

The connection between human and non-human actors is also essential in creating the network of the newsroom form (see ANT). The researcher noticed that the news manager does not encourage the journalists to improve their relationships between the human and nonhuman actors. The evidence collected in the fieldwork emphasises that the administration of GK does not support the journalists’ opportunities to strengthen their relationships through social activities. Similar to what the researcher observed, these elements have not encouraged the news crew to build stabilised social networks and develop their relationships more effectively in the social world (see COP, Wenger, 1998). The interviewee at GK Channel critically claimed that this type of relationship

between the journalists on one side, and technology and humans on the other side, is not effectively addressed (NP, GK).

‘...the task of the news editors in the newsroom is based on the individual practices and boundary limits of the particular activity. This means that journalists conduct their practices without shared discussions with other members, about their news producing. This has a negative effect on the news production process and the quality of the news items’.

(Translated by: Abdulsamad Zangana) (NP, GK)

په یوهنډیکي زور لاواز بوونی ههیه له نیوان کارمهندهکان ، ههوالساز تهنها خودی
خوی کارهکه نهنجام ددهات ، واتا به بی نهنجامدانی گفتوگو له گهل کارمهندهکانی هاوریی له ناو نیوز
روومدا یان سهرنوسهر ، نههمش بو خوی کاریگمیری خرابی له سهر پروسهی بهرههم هینانی ههوال
ههیه و ههروهها کوالیتی ههوالهکه له ناو نیوز روومدا .

In brief, the relationship between the journalists in the newsroom is vital in order to bring stabilisation of the newsroom network. Also, it provides the members with the opportunity to learn more surrounding community and practices of the newsroom network. In this context, both the concepts of Latour (1981) and Wenger (1998) focus on the negotiation and mutual relationships between the human actors in order to shape the network, actor behaviour, and practice as well as follow network goals.

7. 6. The journalist workshop in the newsroom

Journalists’ participation in training is arguably one of the best opportunities to improve their work skills and engage in the process of workplace learning (see, COP). The researcher obtained some opinions in an informal discussion with the journalists surrounding the notion of learning, specifically, the collective process of learning. The majority of journalists in the GK Channel argued that the training should be carried out in order to ensure a high quality of news production and improve the ability of journalists to deal with news practices. In this context, the researcher noted that the training course for journalists at the

GK Channel is more focused on improving work skills, providing introductory material surrounding the news practice in a short period of time. The researcher conducted a workshop for the news reporters in the GK channel and observed that the short training sessions were not sufficient to provide in-depth information and update their knowledge relating to news production.

The training in general offers the journalists a chance to build interaction between them in order to engage in the process of learning. In other words, Bleakley et al. (2011) argues that learning occurs more predominantly within ANT and COP in these two forms: the social learning between the network members in their everyday life and another form occurs within the context of cultural processes and interaction with non-human actors such as computers, objects and artefacts within the network. The researcher observed that the journalists require involvement in an in-depth learning process through face-to-face training in order to improve and rebuild skills as well as exchange experiences within the newsroom.

Wenger (1998) argued that the workshop, or any sort of training as part of the learning process, is a useful tool to encourage journalists to have better understanding surrounding the practical life in the social world of the news station. The researcher noted that the journalists in the GK newsroom are required to participate in the workshop and training courses, especially those regarding the newsroom culture, technical material and other aspects of news production. For instance, the researcher observed that some of the new journalists need fundamental improvement of editorial skills, visual aspects and more the different tasks within the newsroom. In the interview, the news reporter at the GK Channel stated that:

‘...We have not participated in workshops and training courses about news writing and news practices. The administration of GK Channel did not care to run the workshops surrounding the news practice in the newsroom. Of course, this type of training has many benefits to us and improves our skills, especially regarding news practice, the news editing process and shaping the news

production. Also, the workers did not participate in any training about using computer systems or new technological tools. For example, since 2005, I have participated in the journalist training outside of GK and I did not join any workshop through this channel’.

(Translated by: Abdulsamad Zangana) (NR, GK)

تا ئیستا خولی راهینان بو ههوالسازمهکان نهکراوه ، گرنگی نه دراوه به کردنهوهی خولی راهینان و پیگه‌یاندنی کارمه‌ندان به تایبته له باره‌ی شیوازی کردن له نیوز رووم و دارشتهوه و پروسه‌ی به‌ره‌م هینانی هه‌وال. هه‌روه‌ها کارمه‌نده‌کان تا ئیستا خولی راهینانی کومپیوته‌ر و ته‌کنه‌لوژیای نوی بو نه‌کراوته‌وه . من خوم به‌شداری خولیکی راهینانم کردووه له سالی ۲۰۰۵ تا ئیستا هیچ خولیکی راهینانم نه‌بینیوه که له ریگه‌ی ئهم که‌ناله‌وه ریک‌خراپیت.

The researcher realised that these employed at the GK Channel have a gap in their ability to run practical workshops or training courses for the journalists, particularly those workshops that are relevant to the creating news program, the method and technical of coverage the news program as well as field operations for journalists.

In a short, informal discussion with the newsroom members during their coffee break, they mentioned that the training course carried out by the GK Channel administrator, intends to afford the journalists a little knowledge surrounding news practices. For example, piloting a wide range of techniques, and skills, related to the news production, including the form and content. This training course is meant provide new journalists with information about their practical life the newsroom network. The recently employed news anchor emphasises that they did not have any opportunity to participate in any workshop to improve their skills or to understand the new environment of work in GK Channel (AN, GK). The researcher observed that the GK administrator neglected to provide a training course for all newcomers and also, is careless in provide the training to current journalists in the newsroom.

Another journalist in his interview mentioned that the design of the workshop in the newsroom should be dependent on the requirements of news workers. The type of skills they need in order to help them increase their abilities and developing their skills of news working and allowing them engage in the learning process. The researcher observed that the workers in the GK hub need more training courses to produce new frameworks to conduct their practice and to improve their skills and abilities of work. The news editor interviewed at the GK Channel stated that the journalists require more training courses to improve their skills. He commented that:

‘... Until now I was not involved in any training course in GK Channel. This has a negative effect upon my daily practice and on the quality of news production. In my view, we need workshops about our practices. For example I do not have any skills or experience to organise the information with footage. Sometimes I did not see any footage of the news in order to match with the information, especially when I translated news from an Arabic website to Kurdish’.

(Translated by: Abdulsamad Zangana)(NE, GK)

تانیستا خولی راهینانم نه‌بینیوه له‌م که‌ناله نه‌مه‌ش زور کاریگه‌ری خرابی هه‌یه له‌شیوازی کارکردنم . به‌رای من پیویستم به‌خولی راهینانه . هیچ شاره‌زایه‌که‌م له‌وینه‌گرتن نییه . زور جاریش وینه‌ی هه‌واله‌کان هه‌ر نابینم ، نه‌مه‌ش به‌هوی سیسته‌می کارکردنه‌وه له‌م که‌ناله . بو نمونه کاتیک من هه‌والی ومرده‌گیرمه سه‌ر زمانی کوردی له‌ویب سایته‌که‌وه نه‌وه ته‌نها فوتویه‌کی رووداوه‌که ده‌بینم . هه‌روه‌ها

During the fieldwork the researcher noticed that the journalists in the GK have a lack of experience in ‘writing for the news footage’ and the lack of skills to obtain a more advanced level of knowledge regarding the use of news production equipment. The technician in the IT maintenance department mentioned that they created a workshop for the practitioner of the channel, especially when they set up a new device, or technology, in the news practice field. The training course is very short and is based upon offering the journalists instruction in using these new specific tools. Similarly, from the interview with

network/community more stable and avoids problems and misunderstandings between human actors, in order to reach the key goal of newsroom practices.

7.7.The news editor in the newsroom

The news editors are the principal human actors in the news team and 'share a passion for the same thing' with other members of the team (Benneworth, 2013, p.50). The news editors also have the responsibility of managing the news production operations and shaping the news story. They have everyday interaction with the human and non-human actors within their workplace, in particular; the use of news tools, artefacts and dealing with the news crew (Callon and Latour, 1981).

The core tasks of news editors are overseeing, controlling, creating and managing the output of news production strategies in the scope of the newsroom. Also, the news editors have direct engagement in the mutual news projects (COP) (Wenger, 1998), such as everyday news preparations; selection of pictures; visual footage, audio and graphic components of news stories. Moreover, the news editors must communicate widely with other human and non-human actors, as well as the news resources in order to shape the news packages.

The researcher observed that the news editors in the GK newsroom have more limited skills and understanding of such operation than editors in the KNN newsroom. For instance, the researcher noticed that the news editors at the GK channel have a lack of working knowledge across the digital equipment, in particular: the use of automation systems, practical skills in dealing with footage and information; as well as lacking the basic skills of writing to footage. Further, the researcher believes that the news editors at GK have specific challenges in dealing with their tasks and news activities. Specifically the development of news practices of based on the non-automation system. To add emphasis to the above researcher notes that GK's news producer claimed:

'...The news editors, when accessing the newsroom, do not have enough professional skills to deal with footage. They do not apply

the basic writing to pictures or think about the visual aspect of news items’.

(Translated by: Abdulsamad Zangana)(NP, GK)

ئهوانه‌ی که په‌یوهندی کردوو به بهشی هه‌واله‌وه وهک کارمه‌ندی هه‌والساز کاری کردوو ئه‌وه ته‌نها
مصور و مونتیر زیاتر ئه‌زمونی پیش وهختیان هه‌یه له بواره‌کانی خویان واتا هه‌والساز ئه‌زمونی
که‌متره له سهر وینه هه‌یه.

The researcher observed that the skills of recognising footage editing are more likely to be held by the cameraman and footage editor, not the news editor. Also, the researcher noticed that the news editor’s tasks in the GK Channel, focuses more on the editing information; the skills of writing, editorials and research for information. For example, some editors lack the skills to balance the footage, time stories, and treat the news stories from different angles. The researcher believes that these aspects relate to the non-automation system of the newsroom. The lack of integration limits journalists’ opportunities to gain multi-skills and multitask in order to build the news packages.

The news producer at the GK Channel made clear their negative opinion of the skills of news editors, particularly in dealing with news footage, finding the most effective shots; which limits news content and news value (NP, GK). He also claimed that:

‘...The footage editors and the news editors do not have any professional experiences or creative skills in finding important footage to form good news packages. The shots have a great impact on maintaining consistent news and creating value. Hence, the lack of such skills affects the content of news quality and the form of the production’.

(Translated by: Abdulsamad Zangana)(NP, GK)

بو مونتيهگان شارهزايان له بواړي مونتاژدا ههيه زياتر تركيز دهكهن سهر فهينل كهت پرو . بهلام له گهل نههمهشدا ههستي خهبري و شارهزاي بواړي ههواليان كهمتره . نههمش بو خوي كيشهمان بو دروست دهكات زورجار به تايبهت له كاتي مونتاژ كړدني ههوالدا . و نازانن چي شتيك له رووي ههوالهوه گرنگه مونتيه ههيه دهتواني وينه باش بدوزيتهوه بهلام نازاني كام وينه گرنگه بو سهر بههاي ههوالهكه . نههمش دواجا كاريگهري له سهر بههاي ههوالهكه ههيه . بهشيويهكي گشتي مونتيهگان به باشي نازانن چي گرتهيهك كاريگهري راستهوخوي ناوهروكي ههوالهكه ههيه.

The researcher noted that the non-automation system for storage of news items at the GK's newsroom does not assist the news editors in dealing with the footage, specifically, in gaining access to the data archive. The researcher observed that it is essential for the news practitioners to connect with other workers to find suitable footage for the news stories. Additionally, the researcher noted that the process of searching takes a long time and a considerable amount of effort in the GK newsroom. The news producer he interviewed claimed that GK's non-automation system is not providing the journalists with effective or capable facilities to conduct their news work, especially as the archive was based on a traditional coding search for each item (NP, GK). During the in-depth interview the news producer stated that:

'...The process of archive coding makes the news practice difficult, by the code number means that news editors cannot always find the required footage, news clips and video items. Usually, we put this code on the news script sheet, which helps the news producer, news editors, news directors and news presenters to recognise the news footages of the news. The coding system for the video archive is complex, this is particularly challenge for the news editors when require footage. They contact other workers in the archive room to find their requirements. This process takes a long time'.

(Translated by: Abdulsamad Zangana)(NP, GK)

ئیمه لیره به سیستمی کود دانان یو فیدیوهکان کار دهکەین هەر وینەیهک کودی تاییهتی خوی ههیه که له لایهن بهشی ئهرشیفی ههوال و کهچهر رووم دادهنریت دواتر بهو گودانه دهنرسریتهوه ، ههروه ئهو کودهش له سهر سکریتب دادهنریت ئهمهش یارمهتی سهرنوسهر دهدات له ناسینهوهی گرتهکان . له نیوز روومی کهنالی گهلی کوردستان ههوالساز پیویستی به وینه بو بو راپورت ئهوه پهیوهندی دهکات به بهشی ئهرشیفی ههوالهوه ، له ریگهی کودهکانهوه وینه پیویستهکان بو سهرنوسهر ئاماده دهکریت . ههروهها ههوالساز شارمزی تهواویان له بوار فوتوگرافدا نییه که ههندی جار بهکاری دههیین بو ول سکرین .

In this respect, the researcher noticed that the news practice in dealing with the 24/7 news operation using non-automation system needs a much greater number of news practitioners, especially news editors that with an automated system yet. The researcher identified that the numbers of news editors in the GK newsroom was deficient to these requirements. Particularly, when the GK newsroom has to produce many news programs in different local dialects with limits news workers. Consequently, the researcher believes that the lack of news crew has impacted on the quality and quantity of news production. This aspect creates many problems for the news practitioners such as work stress and makes the newsroom network unstable (ANT). The director of the news department responded to the researcher observation and stated 'that there is not a necessary balance between the number of news crew and the amount of news production at the GK Channel' (ND, interview, GK). He also argued this has impacted on the quality and quantity of news and production workflow in GK Channel (NP, GK).

The researcher identified that GK's news resources are based on the news agency and local sources. The news editor in GK stated 'the interpretation and translation process of the news consists of different languages, including Arabic, Turkish and English' (NE, GK). In his interview the news editor in the GK newsroom mentioned that there is a 'small news crew to interpret news texts from other languages. The news editors indicated that they are only able to write and edit news Kurdish and there is only one English and Turkish interpreter in the newsroom' (NE, GK).

هه والسا زمكان به شيويه كي گشتي زماني عهره بي دهزانن ، بو كاري وهرگيراني هه وال باشه ، ههنديكيان
تهنها زماني كوردی دهزانن ، و يهك كه سمان تهنها زماني ئينگليزي دهزاني ، بيگومان ئهمهش بو خوي
كه م وكوري و كيشه كه ستافه كه ي بهم شيويه كه بيت . به راستي ئيمه پيوستمان به به شيكي

وهرگيرانه له زماني ئينگليزهوه بو زماني كوردی . واتا پيوسته يه كه ي وهرگيران هه بيت له ناو نيوز
روومدا كه پيشتر هه بووه به لام ئيستا ئه و يه كيه له ناو به شي هه والدا نه ماوه.

The researcher noted that the news editors have an effective association with other news workers in some aspects of the news practices, specifically with the news presenters, news producers and news reporters. In the case of the news producer in the GK newsroom, he discussed that the news practice in GK 'is established on the work relationships in order to implement their daily plan and to control news production process' (NP, GK). The news editor stated in this respect that the level of relationships has taken a different form between the journalists to conduct their practices in the workplace effectively. The news producer also stated that some of the journalists have a weak relationship with other members and this affected the news quality, teamwork and stabilisation of the newsroom network (NP, GK).

Additionally, the researcher believes that the newsroom networking activities are essential to shape journalists' behaviours, relationships and their actions within this environment. The communicating and networking is important in both of ANT and COP models for successful outcome (see, chapter, 3 and 4). In this manner, the interviewee at the GK Channel claimed that the journalists directly contact the news producer as a focal actor (ANT) to provide them with extensive instructions and information surrounding their everyday news plans as well as to answer their quires. During this phase, the news workers discuss the daily plan and news items on the script sheet (NE, GK).

This aspect of the newsroom action concerns Wenger's (COP) concept of negotiation (1998) and also, the human actor conversation in order to shape the artefacts and shape the way of things (Howcroft et al., 2005). Then, in the GK

newsroom the news editor stated that ‘the news producers offer them the news items to edit, rewrite and organise information as part of the everyday newsroom routine’ (NE, GK).

که هاتم بو دهوام سهرمتا پهيوهندی به سهرنوسهر دهکهم بو نهوهی بزانه چی پیش من کراوه ،
تهمشایهکی ههوالهکانی پیش خوم دهکهم دب سهرنوسهر دهلیم هیج ههوال ههیه من بیکهم . یان
خوی پیم دهلیت نهو ههواله بکه .

The researcher noticed that the news editor and news anchor have the same news desk where they conduct their news practices. Sharing a small space inevitably creates more stress and barriers for the news practitioners, especially at the time of news broadcasting. The non-automation system does not provide a flexible way to deal with this situation. The researcher observed that the main obstacle in this situation is narrowing of deadline timeframes for reviewing, organising, editing and checking the news items by the news anchor. This subsequently affects the mutual relationships between these two human actors in the newsroom environment (see (COP) Wenger, 1998).

In regards to this situation, the news anchor gave a negative opinion when interviewed in relation to the above circumstance of the news practices. He argued that the shared desk space created a lot of problems for them, particularly when they conduct news work before going to the studio and checking the news content. He also noted that if they had an automation system in the newsroom, they could control this situation and conduct the news practice in different and more flexible ways (AN, GK).

The human interactions in the newsroom play a great role in developing the social values within the newsroom culture as well as shaping the journalists’ performance in the network (COP, Wenger, 1997). Through this component the practitioners are capable of improving their connection in the work group and joining news project tasks. However, the news editor appeared negative in his view about the cooperation among the journalists in the GK newsroom:

‘...it is rare that journalists participate in teamwork in the GK newsroom. The form of our news practice is based mainly on

individual tasks and single person preparation. Frequently the news works are conducted by only one person and not as a group or team. For example, as the news editor, I am looking at news footage by myself to put on the video wall screen technology, without help from other workers. This situation is the same for other tasks in the newsroom’.

(Translated by: Abdulsamad Zangana)(NE, GK)

تا ئیستا کاری گروپ ورك مان نییه بو نمونه له سهر رووداوێك . ئەمە زیاتر كەسیك ئەم كارە دەكات .
هەندى جار من فوتوى سهر ول سكرینهكه من ئامادهی دهكهم ئەمەش به هوى ئاماده نهبوونی
كارمەندى ول سكرینهوه .

The researcher observed that the news editors in the GK newsroom face many barriers and problems, especially in the limited space of connection with other team members and share as well as task of non-automation system these limiting not provide good tools to establish relationships within the team. The researcher noticed that the non-automation system did not support the skills of editorial work, editing footage, experiences in dealing with production workflow, relationships with members and shaping the news items.

The news editors at the GK Channel therefore experience many problems and obstacles, particularly when dealing with the limitations of non-automation system. As a result the journalists suffer from a lack of skills in conducting news practices effectively. Therefore they have to deal with additional work stress especially as there are too few members of staff. These aspects of the GK newsroom make the network unstable (ANT) as less interaction occurs amongst the actors to shape their network practice.

7.8 The professional skills of news anchor

This section will examine the professional capacity of the news anchor at the GK Channel. News practice requires a wide range of skills and professional expertise from the news anchor in order to work effectively in the newsroom.

This circumstance demands that the news anchor should have professional experience of news practices in order to engage in social activities. For instance, it is necessary for them to have argued information, knowledge and understanding surrounding the newsroom practices in order to develop community role and maintain this identity (see (COP), Wenger, 1998).

The identity of workers is an essential aspect of the COP model. Identifying with a community provides the members with professional thinking and understanding in hold to conduct their practices. In this respect, the researcher observed that the news anchor at GK had a lack of professional skills of news practice and presenting the news items, especially compared to the new employees at the GK newsroom. The researcher noted that the new anchors in GK had a greater demand for more practical skills and understanding, to deal with many aspects of the role. For instance; dealing with the news information; dealing with breaking news, talking to camera; dealing with linear editing systems; presenting the news in a smooth way; communication skills; reviewing items; listening to sound bites and the rundown list. Hence, it is necessary for key roles such as the anchor to have the skills and professional expertise to conduct their tasks and manage their projects efficiently.

The news producers were selected from the GK Channel for a qualitative interview and discussion surrounding the skills and roles of the news anchor in the newsroom. The respondents believe that the news anchor has a different level of work skills and experience in the newsroom, especially when they use computers and deal with autocue technology tools. The news anchor has less expertise in editing information and designing questions for the studio guests (NP1, GK). In other study, Qaradaxy (2010) found that the news programme or news guest requires a lot of work from the news anchor and the journalist. They need to be prepared as well as select the daily subject from a huge numbers of topics. In this context, the researcher observed that the recently employed news anchor demanded improvements. In particular around breaking news stories, questioning skills, interview technique and how to write questions for the guest programme. It was clear to the researcher that these aspects were a problem for the news anchor and needed improvement, especially when they managed their

news guests within the studio. In regard to the skills of the news anchor in the GK newsroom, the news producers commented that:

‘...the news anchors have different levels of skills in using the computer to conduct news practice, for example some of the news anchors are able to manage their daily work whilst others are unable. The skills of the journalists in participating in the news programmes and commenting on the news events are specific and crucial to their job, however, not all journalists have the same level of skills. The news presenters are unable to make questions; manage host debates; or even edit content of news stories in emergency situations and manage live events. Furthermore, the field news producer referred to the skills of the presenter as limited, especially the newcomer (news anchor)’.

(Translated by: Abdulsamad Zangana) (NP, GK)

شارهزای کومپیوتەر له بیژمریکهوه بو یهکی تر دهگوریت ، بونمونه ههندی بیژمر ههیه پرسپاری بو نانوسم تهنها ناوی بابتهکهی پی دهلیم . بو نمونه له سهر مهسهلهی کهرکوک . بو نمونه باردوخی ئارامی کهرکوک . به پیچهوانهوه بیژمر ههیه ئهبيت دانه دانه ئهبيت پرسپاری بو بنوسی ئهمهش بو خوی کیشهیه بو سهرنوسهر ههندی جاریش ئهوهند متمانهمان به بیژمر ههیه که دمتوانن کاری ههواسازی و چاککردنهوهی ههوال بکهن بهتایبهت ئهو ههوالانهی که روژی پیشتر دهگوریت ئهوهش که بهیانیهک دادهبهزیت پیویستی به گورینی کات و روژهکهیهتی .

The researcher noticed that the news anchors (experienced and the newcomer) at the GK Channel attempt to obtain work experience and that they required a training workshop focused on their practice. Additionally, the researcher observed that the newcomer required skills in dealing with the autocue, managing studio guests, extensive improvement of newsroom culture and creating skills of news production. The researcher noted that the news anchor hopes improvements to training will help create a high level of capability related to news work, especially around breaking news, exclusive coverage events and urgent updates on current news stories.

The news producer expressed his negative views surrounding the skills of news anchors and the journalists in the framework of news practices (NP, GK). The news anchor also claimed that 'he is unsatisfied providing the present list of questions on the autocue technology to manage the news guest and make everything easier' (NA, GK). In this respect, the researcher noted that the roles of the news anchor in managing the news host are limited, for example the researcher noticed the news anchors asked the host studio follow-up questions and played a limited role in presenting this information to audiences.

Qaradaxy (2010) identifies that the news guest is a complicated element in the news practice framework. Also, Qaradaxy (2010) illustrated that the process of acquiring a news guest is based on live dialogue, live discussion and presenting the opinion of the host. Consequently, the news anchor needs more support in order to be able to manage and conduct the program. The points of view were about supporting the news anchor in their news practice in the following declaration of the news anchor who stated that:

'The job of the news anchor is limited to reading the questions and asking the guest. This aspect negatively affects the style and form of news presenting. For this reason the producer should discuss with the news anchor in early and pre-interview phases surrounding the guest and topics. This phase offers more chance for the news anchor to understand and control the interview matters efficiently'.

(Translated by: Abdulsamad Zangana)(NA, GK)

هه‌ندی بیژەر پرسپارمکان بو ده‌چیته سهر ئوتوکیوه‌که که ئهمه‌ش بو خوی کاریکی هه‌له و به زیان ده‌شکیته‌وه به سهر شیوازی پیشکەش کردنی بابته‌که . بویه پیویست پیش وه‌خت قسه له سهر بابته‌که بکریت و بیژەر ناگاداری هه‌موو شته‌کان بیت ، ئهمه‌ش به‌رچاو روونی ده‌دات به بیژەر و یارمه‌تی ده‌دات له باش کۆنترۆل کردنی بابته‌تی دوسیه‌که .

The researcher perceives that the key responsibility of the news anchor in the newsroom is managing the news operation by involvement with the news producer and news editors. For example, the researcher noticed that the news

anchors are involved in discussion with the news editor and the news reporter related to the story, help the news producers to find and select the guest, sometime discuss the plan of news coverage and the content of the interview. Also, the researcher observed that the news anchor needs more help, especially in managing the news host, for instance asking questions and supporting information to control the debate via the control room.

The studio guest provides one of the most developed forms of interview within the news genre; this is called a studio guest (1+1 or 1+2 panel) or studio host (Utterback, 2013). The news anchor questions interviewees inside the studio during 24/7 rolling news and attempts to explain, present and deal with all elements for putting the stories into a running order (Wolfe, 2014).

The interview genre requires the consideration of many elements before it is conducted, especially for the news anchor that prepares the interview. For example, the news anchor in the presenting chair should consider the pre-interview phase, which includes the setting of interview, intro, main points (Miller, 2006), interview goals, topic choice, planning, researching, people involved and managing the conversation in the studio. The researcher observed the news anchor in conducting their day-to-day practices, does not have a big role in the operation of the studio host. Their role is limited to some presenting tasks as 'news reader' without involvement in the step of production, for instance the set of interview, introduction and selection of key points.

In the interview with the senior news anchor, it was apparent he holds a negative perspective about the job and practice of the news anchor. In his opinion some of the recently employed news anchors have limited skills and experience in dealing with news presenting. He also mentioned that the GK Channel fails to consider that the new workers should be involved in training and workplace-learning courses, in order to achieve a required level of practices (SNP, GK).

The researcher noticed that the new anchors therefore need more training regarding news presenting. Also, these characteristics of the job provide the news anchor with the ability to manage many aspects of the news story, for

instance control the spelling and grammatical mistakes in the news item content.

From the news producer's interview, it is perceived that the news anchor has limited performing skills and expertise in piloting their news presenting. This researcher was made answer of this as, he stated that the majority of the news anchors suffer from poor skills due to lack experience in news presenting on-screen, in particular regarding such areas as their expression of words, their ability to use the necessary intonation and speech patterns and their inability to determine the necessary or suitable style of news reading (NP, GK).

One of the respondents describes his desire to improve and perform better the role as news anchor. It is important they should follow the news stories and have knowledge surrounding new event updates. This step directly makes the news anchor more knowledgeable and experienced in controlling their duties and informs them of occurrences around the world (AN, GK). The interviewee discussed this aspect of the news anchor regarding their duties. He states that:

‘...Usually the news anchor should have a plan to maintain a full awareness of the news situation: they should follow the news events, visit the newsroom, and be aware of new updates and revision to news items. In this situation, the news anchor has the ability to conduct a creative job and practices. These aspects are crucial for the news anchors to obtain information about the new development of the news stories’.

(Translated by: Abdulsamad Zangana) (NA, GK)

وهك بيزهر نيمه هميشه متابعه هه وال و رووداوهكان دهكهن ، سهردانى ژورى هه وال دهكهم بو
ئاگاداربوون له هه وال تازدهكان ، به هه والهكاندا دهچمه وه . له سهرنوسهر هه والهكان ومردهگرين ، له
سهر ئوتو كيو هه والهكان دهخوينه وه ، هممو فهرمانكان له دهرهينه ره وه ومردهگرين له كاتى

In general the news anchor at the GK Channel needs more training courses to develop their news practice skills. The news anchors demand more involvement in the process of learning to build their knowledge surrounding the news practice, mutual engagement and share resources to exchange information

between each other (see (COP), Wenger, 1989). Hence, the limited of mutual engagement is the key issues in the community of newsroom.

7.9 The skills of journalists and news footage

The skills of journalists in dealing with the footage and news pictures are fundamental skills of the news production workflow. The news workers require knowledge, experience and practical skills regarding several aspects of news video footage, including the name of the shot, function, size, arrangement, selection of the shots and how they work with news information.

The researcher observed that the newsmakers in GK have a lack of skills, ability and knowledge in processing video footage for a news story. For instance, the researcher noted that the journalists do not know how to create a news storyboard or script plan for footage before moving to the field of news. Also, the researcher noted that the non-automation system does not provide the journalists with enough facilities to apply the rule of *writing to pictures* in creating a news package. The interview respondent indicated that the news editors have less skill and familiarity around the use of news footage and organising it in the news packages (NP, GK). One respondent offered a particular explanation for the situation of news editors in GK Channel:

‘...They have little knowledge in recognising and arranging the footage and subsequently using the shot within the news stories. The job deals more with the department of news editing. The editors’ footage selects the shots for news items and news reports. However, the news producer should check the news item visually before broadcast time, particularly, watching all items and checking the content information. It provides their feedback surrounding the footage editing process’.

(Translated by: Abdulsamad Zangana)(NP, GK)

هه‌والسازمەکان شارەزای تەواویان لە بواری وینەگرتندا نییە ، بە تەواوی گرتەکان ناناڵسەوه و چوونیتی بەکارهێنانی ئەو گرتانە، ئەم کارە زیاتر دووبلازی هه‌وال دمی‌کات لە لایەن ئەوانەوه گرتەکان بو هه‌وال و راپورتەکان ریکەدخريت . بەلام سەرنوسەر ئەبیت پێش پەخشکردنی راپورت و هه‌والەکان ببینم)
تویژەر : سەرنوسەر شارەزای تەواوی نییە لە گرتە و چوونیتی بەکارهێنانی لە راپورت و هه‌والدا) .

According to the perspective above, the key duties of the news producers and news editors are focused on the editorial aspect of a news story instead of dealing with visuals and content at the same time. This aspect of their job is problematic when creating good visual aspects for the news stories. It appears that the news footage editor has full responsibility to conduct this task, particularly the editing of video footage, instead of conducting it as a shared task with the news writers. Hence, the news producer has a lot of work stress, especially in monitoring visual and information content of news stories and looking after the news production workflow in GK Channel.

The researcher observed that the news producers are the decision makers in the newsroom, as an example of a focal actor, and have authority in dealing with the news procedures. The researcher also noticed that the news producers have important roles in creating the final shape of the news production as artefacts and newscast output on-air. For example the researcher noticed that they held key discussions with other news crews in different workplaces in the newsroom, such as the editing room and the control room at the GK channel. The news producer especially encouraged the news crew to find out more information, do interviews and provide more analysis related to the 'project decision of the Kurdistan Region Government' case. Hence, the researcher detected that the news producer has multi-dimensional tasks, determining the duration, form, visual elements and content of newscasts.

The news producer responded that their tasks focus on the coordination between many human and non-human actors in the news production workflow, mainly; to organise news information; edit and revise news stories; conduct searches for information; and also, look for new ideas to make the news more detailed. The participant views indicated the conducting of this complex process

of news practice took place without any regard to the style of writing and applying the basics of writing to pictures (NP, GK). During the interview, the news producer in GK Channel faced many challenges, problems and barriers regard to the news practice. For instance, the lack of journalists' experience; particular dealing with the basic visual ability of a news story, visual communication, graphics and knowledge surrounding the visual materials. The news producer has a central role to impose on other news workers clear goes and instructions (Callon et al., 1986). In the ANT perspective, this focal actor role helps to make the news production network more stable.

The struggles of the focal actor to solve the network problems are based on the discussion and negotiation aspect between the actors. Also, Wenger ((COP) online, 2009) argues that the negotiation between the members in the community has a great role in solving problems and allows them to pass their experiences on to each other. This means, doing what they did in the past, having relevance to what they do now, and sharing history of learning between the journalists in the network (see, Wenger, 1998). The researcher observed the roles of the news producer that attempt to solve the news workers' problems, specifically discussion with the journalists to provide new ideas to solve issues in their practice. For example the researcher noted a discussion between the news producer and a news reporter on the way to shoot the report and framing the size of shots for an interviewee in the report. It become clear that the news producers at the GK Channel are overseeing all aspect of the news operation and the news production workflow.

The news producer claimed that there is work pressure generated by spending a lot of time solving the problems that are faced by the journalists in the GK newsroom. The respondent indicated many factors contributing to this situation, including the lack of skills of journalists, the non-automation system and a lack of experience of news practitioners in dealing with their news packages. In this way the participant 'provides a critical summation, claiming that the news producers decision surround everything and they spend a lot of time finding a solution for the current situation' (NP, GK).

ئەو پالەپەستویەکی ئە سەرمان دروست دەبیت هوکاری دەگەریتەو بو ئەوێ که من سەرنوسەر
 ھەمیشە خۆم سەنتەری شتەکانم و ھەر خۆم بڕیار دەدەم ، ھەموو کات من بڕیار ئە سەر شتەکان
 دەدەم ئەمەش بو خۆی ماندووم دەکات. (تویژەر : ئەمەش بو دەگەریتەو که ستافی ھەوالباز ھەندی
 جار ئەرکەکانی خویان بە باشی جی بە جی ناکەن ئە چارچیوێ کاری نیوزروومدا یان بو ئەو
 دەگەریتەو که ھەوالبازەکان شارەزای ئەوتویان نییە ئە ھەندی بۆرای کاری نیوز روومدا). بۆیە بە

In general, the majority of practitioners argued that the journalists at the GK Channel have a lack of skills in dealing with footage and producing news packages. Also, this issue has impacted on the procedure of the news production workflow and created a lot of work stress on the news crew, and an unstable situation in the newsroom.

7.10 Discussion, negotiations and the daily meeting

The newsroom is a vital space for journalists to conduct their actions in a practical workplace within the television industry. In this environment, the journalists have a wide range of activities and actions to carry out within the social world, providing opportunities for journalists to maintain their relationships with other members of the community. In this space, the journalists attempt to construct a trajectory of learning through discussion and negotiation relating to their practices (COP, Wenger, 1998). Therefore, the journalists have the ability to build their relationships and connections with other members. In this workplace the journalists have everyday discussions and interactions, working together and being involved in social activities.

The researcher observed that the journalists at the GK newsroom have less interaction and conversation related to the news practices than KNN channel. This limits how they build up their information and knowledge regarding the news production processes. For example the researcher noted that the GK newsroom does not have a newsroom conference or editorial meeting to discuss issues surrounding each news programme. Also, the participants in in-depth interviews referred to the importance of the newsroom as a place for conducting and managing the morning conference as well as selecting the key

goals of daily news agenda. The news producer has a negative and critical attitude towards the administrator of GK Channel, arguing that they do not have a meeting and morning conference in the workplace supported by the administrator of the channel (NP, GK). The researcher also noticed that GK's morning meeting does not take place in the newsroom before the newscast in order to shape the news programme and the day's plan. The researcher noticed that the news meeting is only held between the news director and news producer without the participation of other journalists, technical team or news workers. The news producer in GK commented on this topic by stating that:

'...it is necessary to manage the morning conference and the newsroom crew should have regular meetings throughout the day to determine the key goals. The news staff should then be able to determine the priority of news and events on the daily news scripts. However, we don't have a daily meeting and news plan in the newsroom. There are no short or long plans for news coverage in the newsroom. Instead of the morning meeting, the senior news producer and chief of news department have a discussion about key information and news stories. It is necessary to arrange a daily plan in the newsroom in order to conduct, discuss and exchange ideas about the news practice to understand our daily tasks'.

(Translated by: Abdulsamad Zangana) (NP, GK Channel)

پښوېسته هموو بهيانېك كويونډه بڅرېت بو ديارى كردنى پلانى نهو روژه و همروډها ديارى كردنى
 نهوډلوياى ههوالهكان له سهر سڅرېت . بهلام نهمه ليره بوونى نښه . تهناوت پلانى گهشتى ههوالى
 دواتر نښه . بى پلانى له نيوزروومدا ههيه. پښوېسته كويونډه روژنه ريك بڅرېت و نوښهري
 بهشى پهيوډندى دار به ههوال و پروسه ههوالهوه . نهمهش بو گفتوگوگودن له سهر ههوالى نهوه
 روژه.

The researcher noted that there are limitations to the news conference; editorial meeting and newsroom conversation is not directed through activities at the GK Channel, as it impacts on the news practice and the shape of

production. The researcher detected that there is less exchange of information, experience and also less interaction between the and consequently these aspects have negative effects on the journalists' engagement in the learning process as the journalists cannot build their community and produce good quality of news packages.

The researcher noted that the news producer has limited scope to direct the group discussion and build conversations between the journalists surrounding the news work in the GK newsroom. The researcher observed that work stress and too many tasks for news producers limited the opportunities to discuss and converse with the news crew. The news editor has a short conversation is conducted between the news chief and news producer to find out about key points of the daily news script (NE, GK). At the same time, during his interview, he mentioned:

‘...this conversation content between these two members of news will select a property of daily plan without involvement of the news editors or other journalists. This aspect does not support us (as news editors), to manage our daily work. This makes the situation more stressful. However, the journalists participating in the newsroom conference and discussing news items in-depth, provides the news crew more understanding and interaction to make a more successful news bulletin’.

(Translated by: Abdulsamad Zangana)(NE, GK)

بو نمونه : سهرنوسهر له گهل سهرپهشتياري ههوالدا ئهم كاردهكهه ئهمهش بو خوى قورساي دهخاته
سهر ئيمه و بوچونهكان كه متر دهبن به بهراورد له گهل دوو كهس بوچونيان له سهر ههوالهكه ههبيت
. كهواته پيوسته گروپ گفتوگو ههبيت له سهر ههموو لايهنهكاني ههوالهكه.

The researcher observed that there is a gap in gathering together the journalists and technical team at the GK Channel to conduct a successful discussion relating to the daily news plan, reviewing newscasts and making a plan for the following day's newsroom practices. According to the ideas that were expressed by the

senior news producer in his interview, 'the news producer conducted a short discussion at 08:00 with the news chief to create a news plan, headline, topics and news agenda'. The senior news producer argued that this type of conversation is not enough to make a good news plan for a long day covering news events, especially because the conversation is not a group activity, and members cannot freely express their own ideas as well as exchange their experience to create good news programmes (SNP, GK). The researcher noticed that in the GK newsroom there is a lack of conversations and discussions between journalists, for instance the news crews do not have conversations relating to the news strategy or plan of the news story, editorial, form of story, nor building graphics or visual aspects. The researcher observed that the journalists individually work and decided about the news items and then the news producer conducted a checking process and revision to news item as a focal actor (ANT) gatekeeper in the newsroom.

The researcher noted that in the GK newsroom the journalists have space to express their relevant ideas and opinions freely to the news producer. For example the ideas that are relevant to the development of news practices and news production workflow. The interviewee in the GK newsroom stated that the news producer provides journalists with the chance to discuss and express their ideas surrounding news practices and news production, in order to achieve the community goals and develop the news production process. According to the journalists' opinions, the news workers' discussion is focused on the news operation, such as how to cover a particular news event in the field. This includes finding guests for the studio, updating information and providing analytics related to the news story (NP, GK).

However, the researcher observed that there is a limited space for discussion regarding policy and political issues, specifically relevant to the PUK Party, who fund GK Channel. This aspect makes the news worker more committed to work in line with the policy of the Party. The policy of PUK is to determine the form of discussion and content of their news production. In this way, the news producer agrees with the comment above. Furthermore, he argued that the journalists do not have freedom of speech and expression of their ideas about news relating to

the PUK Party. This freedom is determined by the policy of the Party, thus, if the news content is against the PUK Party, the journalist is under pressure to remove or edit such items from the news script and rundown list (NP, GK). On the same topic another participant claimed that the news editors do not have authority to remove news from the news list which has special relevance to the PUK Party without permission. In this aspect the news chief and news producer will decide about the news item and content (NE, GK). Abdullah (2008) showed that the journalists in the newsroom have been informed surrounding the policy work of GK Channel. This means that the news workers are cognisant of what news and programmes the channels prefer to broadcast. The researcher noticed that this aspect of the PUK Party policy has impacted on the journalists' thinking in their news practice, specifically in creating work stress and additional tasks within the frame of news productivity.

The interviewee supports this description of the newsroom situation; he also claimed that he has too much stress, piloting daily tasks and news projects in the newsroom. In the journalists' opinions, this aspect has a negative impact on the journalists' time to discuss and create relationships between them (NP, GK). Moreover, some of the news workers in the newsroom emphasise that they do not have enough time to discuss the method of news development in the newsroom. They suggested that this news production work is carried out individually rather than through teamwork (NE, GK).

COP model would argue that the everyday meetings and negotiation between journalists are essential for managing and developing the scope of the news production workflow (see Wenger, 1998). Such negotiation helps journalists to find their identity, roles, positions and meaning for their practice within the newsroom. In GK much of this discussion goes through, the news producer (as focal actor (ANT)). This means he is able to convince the journalists (Callon, 1986) to follow the key goals of the news production network. Having said this the lack of interaction and joint work limits mutual engagement (COP) and places excessive burden for maintaining network stability (ANT) on the news producer.

7.11 Daily work and practices in the GK newsroom

This section discusses everyday practices and actions of the journalists within the workplace. GK's newsroom practice is based on the non-automation system and 24/7 news services. In this framework, the journalists face many challenges compared to KNN channel, for example, the non-automation system does not provide news practitioners with facilities to communicate between the news workers, manage their practice and controlling the news production workflow. This limits Wenger (1989) argues is a key aspect of a community of practice, that 'practice is a way of talking about the shared historical and social resources, framework and perspective that can sustain mutual engagement in action' (Wenger, 1989, p.5).

The researcher observed that the news producer in GK Channel has the greatest responsibility to engage in the news production team and be involved in everyday news practices. The researcher examined everyday practices closely, discovering that the key tasks of the news producer includes, the mentoring the news writing, editing footage, voiceovers, graphics design, organising studio guests, managing deadlines and managing the news crew. The researcher also noticed that there are no integrated and automation facilities to help the news producer to manage their news practices and deal with news items as one package. This gap in the newsroom facilities is addressed by automation systems. Hence, the researcher believes that the news producer has the highest work stress position in the GK newsroom, in particularly with the use of the non-automation system.

The news producer commented on 'the newsroom work of GK that is based on the routines shift of timetables and news agenda, broadcasting from the newsroom from 08:00 to 00:00'. The news producer discussed the circumstances of management in the workplace, by indicating the limitation of the newsroom in both technical and human resources aspects in GK. For instance, the lack of integrated automation system limits the technical (nonhuman) support available to the news producer. Furthermore, a lack of specialist adviser or consultants in the news team (for example, a UK politics

expert when needed) adds to the burden on the news producer (NP, GK). In this way, the researcher detected that the setting of the news production workflow at the GK hub is not efficient in comparison to the automation system in the newsroom (see chapter 8). Consequently, there are many obstacles that face the news crew, for instance, the news producer dealing with the non-automation system and managing the news production workflow. In regard to this aspect, the news producer commented that:

‘... The news producer plays a vital role in finding a solution to the problems that face the journalists in their everyday practice and also, in finding new ideas, shaping the news programmes, creating plans and producing news items. The news producer attempts to support the news editor’s crew, offering them news information, looking after their news production, organising the news script and searching for news stories. These extra tasks for the news producer make our assignments more complex and more difficult to manage. This makes us unable to focus on the operation of news production and the news quality’.

(Translated by: Abdulsamad Zangana)(NP, GK)

له سهعات ٨:٠٠ بهيانیهوه تا سهعات ١:٠٠ بهیانی تر کارکردن له نیوز رووم ههیه . له ناو ژووری ههوالی گهلی کوردستان گروپیک نییه ناوی گروپی راویژکردن بیت و دوزینهوهی بیروکهی نوی بو ستافی ههوال و سهپورت کردنیان به زانیاری زیاتر له سهر رووداوهکان . ئهمهش وا دهکات کاری سهرنوسهر زوترر بیت و زیاتر سهرنوسهر سهرقال بیت به گهران و دوزینهوهی ههوالی نوی و زانیاری زیاتر له سهر ههوالهکان . ههروهه ئهوهنده سهرنوسهر سهرقالی و چاودیری کردنی کارمهندان و چارهسهر و ریکخستنی سکریبت و دوزینهوهی زانیاری و ههوالی نوییه ئهوهنده سهرقالی پروسهی بهرهم هیتانی ههوال نییه.

The researcher observed that the news practitioners are not encouraged by the administration to work creatively in the GK newsroom. For example, by providing them with training courses and engaging them in the process of learning, they could be more productive and active in the newsroom. The

researcher noted that the main cause of these issues is the lack of encouragement to create teamwork, group discussion and conversation between the journalists. For example the researcher observed that this situation leads to a lower level of interaction and connection between the members which decrease values of learning, creating less successful news programmes and being unable to construct a productive community in the GK Channel. Regarding these issues, one of the interviewees stated that:

‘...We don’t have a daily meeting. This is a big problem in determining the news plan and managing the news agenda. The news producer needs a lot of time to review all news material, both new and old items. Also, the news producers communicate with the news crew, including the news editors, news interpreter and news directors to provide them with daily tasks, instructions and determine their role in the news operations. They are instructs of their role through written or spoken communication. They are only allowed a quick look at the website or news agency to find new. Furthermore, the news writer asks the news producer to allow them to work on the news items and almost always need their approval’.

(Translated by: Abdulsamad Zangana)(NP, GK)

کوبونهوهی روژانه نییه لهم کهنا له واتا روژانه پلانی کار نییه بو بهریومبردنی کارهکانی بهشی ههوال ، سهرنوسه کاتیک دیت بو بهشی ههوال تهمشای کارهکانی پیش خوی دهکات ، پهیهوندی دهکاته ستافی ههوالسازهی که له گهله کار دهکهن نهو روژه نههمش بو نهوهی ئهک و کارهکان دابهش بکات نهگهر ههبيت . یان ههوالسازهکان خویان دهست دهکهن به گهران دهکهن به دواى ههوالدا له ریگهی ویب سایتهکانهوه و ئازانسهکان ، گهر ههوالی باشیان دوزیهوه نهوه به بهرپرسی ههوال دهلین نه ههوالمان دوزیهوه . بیکهین نهوهش بریاری له سهه دهکات. که بکریت یان نهکریت به ههوال واتا سهرنوسه.

The researcher observed that the process of news checking procedures by the news producer, for example he checks previous shift tasks, the correspondent emails, the website to update the status of online news, the news management

process and also any received newssheets from the news sources agency. The researcher noticed that the news producer, as key gatekeeper of the newsroom, has to do the majority of checking and co-ordinating, for instance, the reviewing tasks for the news report, news headline, news programme, news items, corrections, proofreading the news item, news update, obtaining the videotape, the editing process, filming-editing, checking the video wall screen footage, news films, the duration of the news bulletin and the development of news stories content.

It is widely accepted by the journalists and news producer that the news practice has many obstacles and problems in GK Channel, particularly regarding the styles of management, news practice and production workflow of news. Thus, in relation to the news practices, the journalist's statement emphasises that the non-automation system does not support the news practitioners to increase the newsroom productivity.

7.12. Conclusion

This chapter has discussed the research questions surrounding the newsroom practice, the newsroom network and the community of the newsroom. Each section of the chapter aimed to explain and describe how journalists conduct their practices in the GK newsroom. Data was gained from the interviews of participants including the news producer, news editor, news director, news reporter and other workers in the newsroom. The respondents illustrated their point of view with regards to non-automation system and the researcher observed their behaviour in daily activity. The section was further support by using and gathering documentations related to the area of research. The participants claimed that the journalists have problems with their identity of news practices and understanding their tasks in good way. In this way, some key themes emerged during the analysis of the news workers in-depth interview and researcher observation in the GK newsroom.

The relation to the learning process (COP) and the exchange of information between the journalists in the newsroom, the researcher observed that the

workers have less interaction and exchange experience in their group work than at KNN channel. Also, the findings showed that the non-automation system does not provide workers with the necessary tools to exchange information, and conduct collaborative interactive news. Further, the researcher noticed that the non-automation system makes barriers to the journalists in their practices and tasks in the workplace.

In regard to the learning process (COP) and workshops, the journalists argued that there are no any training course to improve the ability and skills of the worker in the newsroom practice. The dominant opinion of the news workers such as the news editor, news producer and news anchor was that the journalists did not have enough space to negotiate, opportunity of learning and discuss their news practice and share news projects. Further, the researcher observed that the GK channel has neglected to lunch professional workshops to improve and develop the skills of the journalist in their everyday news practices.

It can be argued is a GK newsroom, non-stable network (ANT), in this manner, the news producer needs a huge effort as the focal actor (ANT) or community leader (COP) to keep it functioning and make the network more stable. Also, the findings showed that the non-automation system of GK newsroom and the tools makes workers isolated from each other in the process of news production, it does not support the human actors to easily conduct their practice. This aspect makes the integration of the news production difficult, for instance, the journalists ability in the non-automation system is limited in dealing with writing for the pictures and editing footage within their desk work. The lack of network stability is reflected in the limited form of the workplace community. Not only does the technology not support interaction, the organisation of the workday lacks communal interaction opportunities, for example the lack of a full team morning meeting and conversations. More broadly the siloed and individualised working combined with a lack of training opportunities limits skills development and exchange. Overall the team lacks opportunities for mutual engagement.

Furthermore, the non-automation system is not set up to conduct collaboration and co-work between the journalists in the GK newsroom. This makes the journalists conduct their practice in separated area and workplace individually. In this context, the journalists are not multi-skilled in the role is kind of ironic, that they have clear limited roles, however the journalists in the GK network do not have professional experiences and high stress because the work context is unstable and not organized well. By contrast, this aspect significantly different with the digital newsroom, where there are multi-skills and the roles of journalists within the news production are more dynamics and efficient.

Chapter Eight: Analysis of the data, the newsroom of the KNN channel

8.1 Introduction

This chapter will discuss the journalists practice in the digital automation environment, within the KNN newsroom network. The chapter will explore elements of the newsroom practice and news network production, providing an in-depth explanation of how the data and outcomes connect the situation of news practice key notions of both the ANT and COP models (see, chapter, 4 and 3).

This chapter is set out in eight sections that describe the analysis of fieldwork data. Section 1 focus on the technology used by the journalists in their daily life and facilities. Section 2 looks at the situation of news production process in the KNN newsroom network and the journalists' daily routine. Section 3 discusses the *everyday practice* of journalist in the newsroom network and their *relationships* with each other and technology tools. Use of the Avid system for everyday practice will be explained in section 4. The section 5 focuses on the information surrounding the role of the news producer as an example of the *focal actor* (ANT) in the newsroom network. The section 6 will focus upon the news editor and their responsibility in shaping things within their network. Section 7 which focuses on the journalists experience and skills and the *learning process* (COP) within their workplace. This is followed by section 8, considers the skills of journalists in the newsroom practice and provides an explanation of the ANT and COP approaches. Finally, the last section will provide information surrounding the visual aspect of the journalists practice in dealing with news stories. Overall, internal structures of the news workers position in the KNN newsroom (see, diagram 8.1).

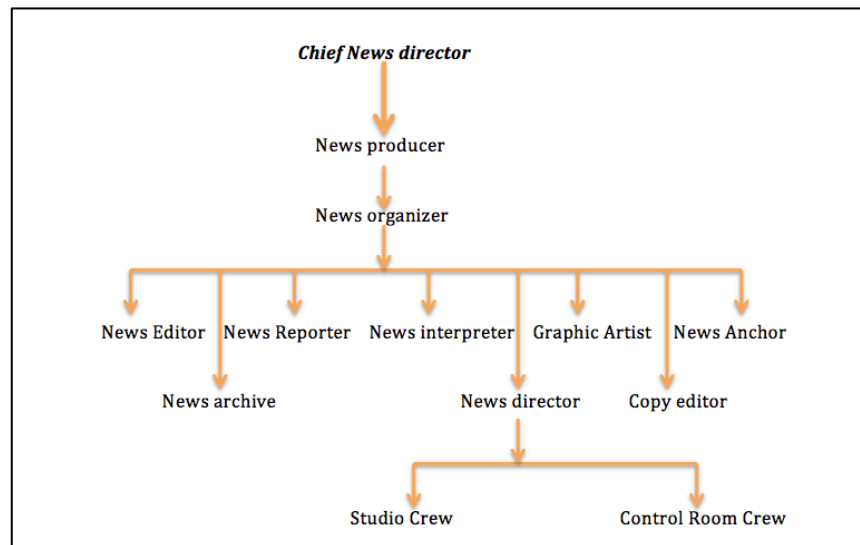


Diagram (8.1) structure of KNN newsroom

8.2 Technology use and news practice

The essential characteristic of the KNN newsroom is the implementation of the automation system. Also, the use of news media technologies provides the practitioners with more opportunities to conduct the news practice in multimedia, multi-skill and multitask approaches. In particular, this tool provides the journalists with more opportunity to interact with each other and also, involves them in the learning processes in the workplace community (Wenger, online, 2009).

The researcher observed that the workstation editing and digital desk of the nonlinear automation system in KNN provides the journalists with new skills to deal with the news production workflow as compared to GK. Also, the researcher noted that the automation deskwork offers the journalists a faster pace of work by using high-level techniques and tools to control the process and to construct news packages.

The Copy editor who checks news language aspects in the KNN newsroom offered a positive idea surrounding the journalists' interaction with the automation system (copy editor, KNN). In his opinion, there are a good number of skills needed in using the Avid technology in everyday news practice, especially in order to edit news, monitor news by other journalists and update

stories, accessing and double-checking news items. Also, he noted that the automation system has a huge impact on relationships and network connections (copy editor, KNN).

The researcher observed that the newsroom system offer the news workers many capabilities in order to control and manage production workflow, in particular, generating professional contribution in their news practices, providing feedback and in communicating with the users and peers in the workplace. The senior news reporter emphasised this aspect in their interview. Relating to the use of the automation system in their everyday practice, he claimed that:

‘...the automation of Avid technology provides our news practices with unlimited facilitates to manage news operations. We don’t use tape to record video and audio. We broadcast the news programme directly. The system tells us about the duration of news items – 40 to 50 seconds, longest news 40 seconds – but sometimes this duration will depend on the news value and importance of the events’.

(Translated by: Abdulsamad Zangana) (NR, KNN)

ثاڤيد زياد له ٻيوست يارمه تي ٽيمه ددات . په گهم کاسيت به کار ناهينين و کاتي هه واکهت راسته و خو ټي دهليت . بو نمونه دهليت کاتي هم هه واله ٤٠ چرکه يه . يان ٥٠ چرکه يه . (KNN) دريژترين هه وال بريته له ٤٠ چرکه به لام هه ندي جاريش به ټي به ها و گرنگي هه واله که ده گاته ٥٠ چرکه . کورترين هه وال بريته له ٣٠ چرکه .

The researcher observed that in KNN the automation system provides the facilities to journalists to organise their news production workflow and management of news practices within one digital desk duty framework, for instance coordination among journalists allows the news worker to structure the news stories, transform the news to autocue in the news studio and deal with the news program and undertake specific search.

The researcher perceived that there are different levels of knowledge and experience among the newsroom members, particularly, between the old journalists and new workers in manage their tasks in the workplace. This aspect of the newsroom creates an unstable situation for the news network (ANT) and the focal actor (News producer) attempting to fix and solve problems to bring more stabilisation to the workplace. The senior news anchor stated that the news anchor has a great amount of knowledge, experience and information related to use of the automation system in KNN's newsroom network. In his comment he stated that:

‘...in general the majority of the news anchors are proficient at using the newsroom system. They have skills to use the automation, especially Avid and iNews. They are able to manage their everyday duties. Currently, we have problems in setting up a workshop about the use of the automation system’.

(Translated by: Abdulsamad Zangana) (NA, KNN)

به شیوه‌کی گشتی هم‌وو بیژده‌رگان له ئاستیکی باشند . له کومیتوتەر شارەزایان ههیه له به‌کارهینانی (I-news) و (Avid) ته‌ن‌ها ئاسته‌که‌یان بو به‌کارهینانی روژانه‌ی خویان واته‌ن‌ها کاره‌گانی خویان به‌ری ده‌که‌ن. کیشه‌یه‌کی ترمان ههیه ئه‌وه‌ش بریت‌ه له کیشه ئه‌نجامدانی ورك شوپ و

The researcher remarked that the news practitioners in the KNN newsroom have experience in working with both kinds of system – the automation and non-automation systems. The senior news editor in KNN Channel, in his in-depth interview, highlighted news workers' ability and experience in dealing with the automation technology, Avid. His comments are that:

‘...the news editors have skills and experience to deal with a variety of computer programmes, for example, Microsoft, Excel, Avid and iNews technology. As a news editor, I do not join in with any workshops to develop and improve my computer skills. Actually, I learned to use the system by daily practice. When I face problems I ask my colleagues to help me solve it or exchange experiences to deal with it’.

شاره‌زایم له به‌کاره‌ینانی به‌رنامه وهك ورد و ئاكسیل و ئافید و ئای نیوز. هیچ به‌شداری له ورك شوپی كومپیوتهرم نه‌کردوو، ههر به نه‌زمونی خوم فیر به کاره‌ینانی كومپیوتهر بوومه ، کاتیک نه‌گهر کیشهم هه‌بیت نه‌وه به‌شی ئای تی دیت چاره‌سه‌ری بوم ده‌کات.

The senior news producer in the KNN network claimed during his interview that the automation technology, Avid, provides them with many benefits in their everyday news practice, making the work easier in the framework of the news production (SNP, KNN). Also, the senior news producer noted that the use of automation system in the newsroom provides the journalists with new experiences, whilst the news worker has already experienced the non-automation system use. In this respect, he also stated that they found work in the traditional newsroom more difficult compared to having the automation system in the workplace (SNP, KNN Channel). In regard to this aspect, another news producer in his interview referred to the problem facing the KNN newsroom when they update the automation system version of Avid technology. Here he stated that 'we return to work on the non-automation system and we understand that the work without the automation system is difficult for the news practitioner (NP, KNN Channel).

KNN's newsroom is based on digital network and integrates many aspects into the production workflow, for example these the digital desk news practices.

- Online dynamic news scripts
- Online rundown list news
- The ability of journalists to access the Internet from the field to connect to the newsroom
- The tasks are based on the nonlinear editing devices
- The use of tools for video file and media exchange among journalists
- Online archives database system

The senior technical person when interviewed claimed that the Avid technology feeds and supports news practice. He also claimed that:

'...the Avid system supports the news team to make the work easier. For instance, the airplay makes our news work easier, especially when we need to come back and go forward to know about a news item, also, the news crew do not use cast tape for recording or transferring video recording material for other sections of the Avid, it's digitally easy to use. This aspect of the automation has a lot of assistance for news practices. By using the automation system the news crew have the capacity to conduct the news production activities in perfect ways'.

(Translated by: Abdulsamad Zangana) (The senior technical person, KNN)

ئەم ئافىد و ئاى نىوزە ئاسان كارى زورى بو كىردووين. ئەو (airplay) انە گەورەترىن ئاسان كارى بو تەلەفزيون كاتيك تو پەلەى دەكەيت. (puse) دەكەيت دەرەو دەيتەو پەشەو بو دواو ئەم سىستەمە بە كارەينانى زور ئاسانە ئەم بە كاسيت ناكريت ، ئەم كارە بو تەلەفزيونى ھەوالى بە كاسيت كار ناكريت، ئەم تەكنەلۇژىيە كە ئىستا لە ئافىد بە كار ھاتوو زور پەش كەوتوو كاتيك شتيك دەنيريت بو شوينيك راستەوخو دەتوانى ئەو بە (enter) پەلەى بكات ئەم زور ئاسانە.

The KNN newsroom is therefore a complex network of human and nonhuman actors (ANT) mainly connected through and by the Avid system. The explanations above confirm there is a significant aspect of interaction between heterogonous actors (ANT) within the newsroom automation system. This provides the journalists with more opportunity to conduct their news practice and be involved directly in the workplace learning, exchanging knowledge, sharing news projects and engaging in news activity (COP)(see Wenger, 1998). This makes the news exercise easier than before; particularly, creating linkage with other elements of news production, especially in the rolling 24/7 news operations.

8.3 The operation of news production

At the KNN network, the process of news production has a tendency to deal with new technology equipment by involving many actors. In this way,

Gretencord (2009) argues: 'it is foundational to ANT that we as actors can only know what is real by interacting with other actors (such as people, things, processes and ideas)' (Gretencord, 2009, p.25). The news activities require many technological elements to create a good format of the news packages, specifically, by involving a wide range of non-human actors (ANT). In the KNN newsroom, journalists contribute to everyday news practices and are involved in the procedures of the news production workflow. The Copy editor in the KNN newsroom network explained his everyday routine and activity in the workplace, claiming that:

'...In the news department, we deal with news stories and news reports. This procedure of news creation includes collecting information, writing, editing pictures, checking language aspect, making news reports, in-house news reports, language checking and monitoring the correspondent production, make it ready to broadcast'.

(Translated by: Abdulsamad Zangana) (Copy editor, KNN)

ئیمه له بهشی ههوال ، بریته له ههوال و راپورت ههیه . سهرجهه ئهه مهتریهاله نوسین له ههوال و راپورتانهی که ههوالساز و پهیامننیر بهرهههه دههینی، پهیداچونهوهی زمانهوانی بو دهکهین .به تایبته ئههوانهه که ئاماده دهکریت بو پهخش کردن . ههروههه ستایل بوکمان نییه له بهشی ههوال

The researcher noted that the journalists' practice in the KNN newsroom is based on a variety of news resources. These aspects include news agencies, web sites, local sources and international resources. The researcher remarked that journalists' everyday tasks begin with a discussion within the news team to select the structure of the daily plan and to check resources for news stories' updates. This aspect suggests that the journalists are engaged in negotiation of meaning and share their repertoire (COP)(see Wenger, 1998). Here we return to (ANT) (see, Latour and Woolgar,1979). Glynne et al. (2010) also argued that the 'inscription devices stand at the centre of construction of scientific facts in the modern laboratory'. For instance, 'a scientific paper is produced by

juxtaposing external literature (scientific papers) with internal inscriptions (i.e. data, diagrams etc.)' (Glynne et al., 2010).

The news archive person interviewed in the KNN newsroom, provided in his interview information surrounding the process of news production and news resources, stated that:

'...the news agency provides the newsroom with information and footage of news stories, which is often obtained from the Associated Press (AP) and other news sources. Through the local news reporter, the news archive person can gather the news videos. In helping the news archive staff during their seven hour shifts with using of the automation system, we support and feed other departments, such as the video news material and footage'.

(Translated by: Abdulsamad Zangana) (The news archive person, KNN)

وینه‌ی جیهانی بریتە لەو وینه هەوالیانە‌ی کە ئازانسی (AP) بومان دەنریت . هەروەها وینه‌ی راپورته‌کانی ناوێک کە لە ریگە‌ی پەیامنێرانه‌وه‌ کو دەکرێتە‌وه‌ و دیتە بەشی ئەرشیف. بەشی ئەرشیف بریتە لە چوار کارمەند و روزانه‌ جه‌وت سه‌عات کار ده‌کەین ، هەر لە ریگە‌ی سیسته‌می ئافده‌وه‌ هه‌میشه‌ په‌یوه‌ندی به‌ به‌شه‌کانی تره‌وه‌ ده‌کەین .

The researcher observed that KNN Channel has connections with many news agencies to supply and provide them with news stories, footage and also live event content that are transferred into the newsroom by a live stream, for example the Associated Press (AP) and Anadolu Agency (AA).

The chief news reporter in the KNN news network emphasised that the journalists have a great opportunity for conversation between them in the newsroom, particularly relating to the process of news production and updating the news stories. He stated that:

'...Usually the news stories need some updates by journalists especially the stories, which have developed and will headline changes. Through conversations between the newsroom crew

and news reporters, we decide which news to include in the running order and then flow to the broadcasting list’.

(Translated by: Abdulsamad Zangana) (NR, KNN)

ئەم ھەولانەمان زیاتر پێویستە، ھەندی جار ئەپ دیت دەگریت ھەوالی تازە دیت سەردیر دەگوریت .
واتا چەربونەوێ گەفتوگوانی بەرپرسی پەيامنیران و مەنتەج ھەوال پەيوەندی گەفتوگوانی بەرپرسی
پەيوەندی بە نزیك بونەوێ کاتی پەخشی ھەوالنامەکانە.

The researcher noticed that in the KNN newsroom the process of news programme develop and updates occurred across day shifts and this aspect of news practices creating too many discussions, especially when the news stories have development and progress. The researcher observed the process of news updates in regard to the local news stories, journalists contact the news reporter by phone in the field to obtain more information, analysis, more detail so as to run the news story in time. In relation to the international news, with the news crew monitor and follow the development of news via the agencies. The researcher noticed these update tasks conducted by three or more news editors within the newsroom.

The researcher detected that all of the newsroom action, news practice and news editing in KNN Channel begins at 08:00. The news crew conducted a short discussion and conversation in order to determine the news programme content, form and daily plan. The news producer tasks are to provide the journalists with specific instructions on beginning work and running the news editing process. During the in-depth interview of the senior news editor in the KNN newsroom, he referred to a key feature of their news process within the automation system, claiming that:

‘...first, I start by checking the news editors’ work and previous tasks. Through mentoring the news resources and the news items the news editors conduct this action by using the automation news system to search and contact other departments. During this process the news editors know and have awareness about the update of news stories and the structure of the news sheet script’.

(Translated by: Abdulsamad Zangana) (The senior news editor,
KNN)

به‌یانی زوو که دیم راسته‌و‌خو ته‌مشای هه‌واله‌کانی پیش خوم ده‌کهم بو ئه‌وه‌ی بزانه‌ی چی پیش من روویداوه ، بو نمونه له سیستمه‌که به‌شیک هه‌یه به ناوی (Data) له ریگه‌ی ئهم به‌شه‌وه ده‌که‌رینه‌وه سهر کاره‌کانی رابردوو دوینی هاوریانم ته‌مشایان ده‌کهم. بو ئه‌وه‌ی بزانه‌ی چی پیش خوم کراوه ، بو نمونه ئه‌که‌ر رووداوێک درێژه‌ی هه‌بیت ئه‌وه کاری له سهر ده‌کهم و زانیاری تری له سهر

ده‌دوزه‌وه . و هه‌والی تر یان کاردانه‌وه له سهر ده‌کهم یان (Up date) ده‌کهم له رووی زیاد کردنی زانیاریه‌وه .

The ability of the news team in managing the news operation and controlling the production is a crucial element of the everyday news practice in the KNN network. It requires a high level of skill to create suitable forms for the news items. Regarding this, the senior news editor in his interview suggested that:

‘...the key responsibilities of the news editor include editing news, news footage, news information and forming the stories. The news editors are involved in the operation of news checking, choosing footage, sound bites and organising the news text for other news workers. Further to this, the news producer and Copy editor, conduct double-checking for all news items that are edited by the news editor. This ensures the quality of the work and content of news items before flow to the rundown list and broadcasting time’.

(Translated by: Abdulsamad Zangana) (SNE, KNN)

به هوی ئه‌وه‌ی ئیمه وه‌ک هه‌والساز به‌رپرسیارین له وینه و زانیاری هه‌واله‌که، چیکێ هه‌موو شته‌کان ده‌که‌ین له فیدیو و تیکست. له راپورتدا چاریکی تر سه‌رنوسه‌ر و زمانه‌وانی چیکێ هه‌موو شته‌کان ده‌که‌ن ئه‌مه‌ش دوو فلته‌ری تر که چیکێ کاره‌که‌مان ده‌که‌ن. بو ئه‌وه‌ی به ته‌واوی دلنیا بیت له ته‌واو بونی کاره‌که. به‌رام له هه‌والدا له رووی وینه‌وه سه‌رنوسه‌ر چیکێ ناکات.

The researcher observed that the central workplace in KNN Channel is the newsroom space. Also, the journalists, by participating in everyday work, are able to gather news stories to be broadcast on the screen. This aspect of the journalists practice involves many news crews in three key steps of the production workflow, including the preproduction, production and postproduction. In respect to this the researcher detected that the role and functions of news practitioners are different in each of these steps in order to produce news items.

This process helps the journalists to create form for their news practice, and establish their duty and action. It also provides journalists with the ability to establish better communication and relationships between the newsroom members. The senior producer in the KNN newsroom network stated that:

‘...within the newsroom practices, the journalists have to discuss their news report and news stories, and exchange their ideas and knowledge and information in order to create better form for the news items. Also, the news producers and the chief of news editors are involved in this type of discussion, then they decide about the topics related to news creation’.

(Translated by: Abdulsamad Zangana) (SNP, KNN)

له ناو نیوز رووم بیروکهی دروست کردنی راپورت بوونی ههیه ، زور جاریش ئهم بیروکانه له گهل
سه‌رنوسهر و دواتر له گهل به‌رپرسی به‌شی هه‌وال و به‌ریوه‌به‌ری نوسین گه‌فتوگۆی له سهر ده‌کریت و
دواتر بریاری له سهر ده‌دریت.

Wenger (COP) (1998) emphasised that the relationships between workers is an essential aspect of development of the community. The researcher observed that in the KNN newsroom the news manager encourages the journalists to create workplace relationships as well as encouraging them to perform and improve their ability to make friendships and good relations in order to organise their news production framework. For instance the researcher observed the news producer discuss with the news editor to organize a suitable time for a social event in the weekend outside of the newsroom. During an

interview with the chief of the news department of the KNN newsroom, he referred to the effort of the KNN network in supporting the journalists' strong relationships in the news practice. He stated that:

'...there are good relationships between the newsroom practitioners. Often, they have open discussions surrounding their news practice, for example, the news producer conducting a search for the news item then allowing other journalists to edit and create the news story. In this regard the news producer discusses the content of the news with them and provides them with opportunities to talk about the matters especially for news editors'.

(Translated by: Abdulsamad Zangana) (CN, KNN)

په یو نډیکې ټالوگور له نیوان کارمندانگان یوونی ههیه، هه میسه گفتوگویه کی کراوه بو دهوله مه نکر دنی هه واله کان له نیوان ستافی هه واله یوونی ههیه که من خوم گهران به دوی هه واله دهکم، جواتر دابهشی دهکم به سهر هه واله سازمگان بو نمونه نه هه واله له کوی تر باس کراوه چوون دهکریت نه هه واله بکریته هه وایکی باش به وهرگرتنی لیدوانیک بوی دهرفت دهرخسینم بو هه موو هه واله سازمگان بو نه وهی گفتگو له سهر هه واله کان ز ناوهر وکی هه واله کان بکن.

In general, the operation of news production in the newsroom is based on the relationships and mutual engagement (COP) of the journalists in news practice (see Wenger, 1998). This aspect includes many tasks and activities, such as shaping news programmes, news packages, dealing with various news resources and using the automation system in production workflow.

8.4 The everyday journalists practices in the newsroom

The new technological tools are able to influence the structure of the newsroom network. Through this change the journalists have opportunities to create new strategies and practices, in particular in dealing with new devices and obtaining more detail surrounding the news production. Hence, the newsroom standards of communication, such as automation Avid technology, guide the journalists to

reach their daily goals. The researcher observed that the news practices and everyday interaction in the KNN newsroom is designed by the automation system and digital environment; this opens up a new way of carrying out duties for the journalists in communicating, practising and interacting with the news crew as well as becoming more involved in the collaborative work and building their productivity. The researcher observed that the news team has the ability to edit and to share the news stories content and form within the network system to obtain additional feedback and are able to check processes used for the item by other colleagues.

The researcher noticed that the news practitioners in the KNN newsroom have more interactive relationships in the workplace than at GK, mainly within conducting their news practices and news projects. The researcher observed the discussion between the news producer and news reporter about a piece to camera in the report and how and what, the reporter should say in the piece to camera. The discussion happened to provide the news reporter with more tips surrounding the news story. The copy editor who checks the language aspect of news stories in the KNN newsroom believes that the circumstances of journalists' relationships in the workplace are well constructed. During his in-depth interview he commented that:

'...We have good relationships with the members of the newsroom. We discuss frequently and listen to our colleagues' ideas and opinions about the news practices and news content. Principally, this conversation helps us to develop news projects in the newsroom, for example, dealing with different phrases, words and terms in the content of news stories. In this manner, if the news writer makes a mistake in the editorial aspect of news, I will tell them to fix and improve their style of writing. Of course, the workers accept my ideas and they follow my advice in their news story'.

(Translated by: Abdulsamad Zangana) (Copy editor, KNN)

په یوه نډیکي زور باښمان هه ی له نیوان نډندامانی ستافی نیوز رووم ، ههمیشه گوی له یهک تر دهگرین به تایبته نهو جوړه گفتوگویانه ی که باس له چونیتی بهر وه پېش بردنی لایه نی زمانه وانی هه وال هه یه نه مهش به پی پسرپویه که ی خوم که کاری زمانه وانی ده که م له نیوز روومدا. نه گهر له حاله تیکدا هه والساز جاریک و دووان هه له ی شوکاری کرد له دارشته وه ی هه والدا نه وه پی ده لیم که به کارهینانی نهو وشانه له هه واله که ی به شیویه کی ناسای نهک وهک ره خنه گرتن.

The above response illustrates that there is a strong relationship between newsroom members in the workplace. The researcher observed the relationships between members of the KNN newsroom, especially discussing teamwork, their assignments, live news coverage and group discussions to determine the news plan within their everyday practice. Lave and Wenger (1991) argue that the COP concept is essentially 'a set of relations among person, activities and world, over time and in relation with other tangential and overlapping communities of practice' (Lave and Wenger, 1991, p.98). In the KNN newsroom network, there is a wide range of relationships among the workers.

According to the senior news reporter in the KNN newsroom, there are very interactive relationships between the journalists, in particular via the use of automation Avid technology. In his interview he argued that:

'...The news and feed that comes via email or telephone are sent directly by journalists in the field. I receive these as the senior news reporter and then. I send them to the news producer to check and decide whether to include the rundown list in order to make news tickers, or prompt editors to prepare the broadcasting. I receive all of the information and the footage to make the news stories. I do the editing and create the news or I send a short discussion about the item to the news writer. At the same time news producers via iNews are able to access the news content to edit, check and add information. The producer knows who does the editing for the news. If the news has a lack of information or footage, the news writer informs the news

producer about the issue. Also, we contact the news reporter to add information and update the news’.

(Translated by: Abdulsamad Zangana) (NR, KNN)

هه‌موو ئه‌و هه‌والانه‌ی که له‌ ریگه‌ی ئیمایل و ته‌له‌فونه‌وه به‌ من ده‌گات راسته‌وخو به‌رپرسی هه‌وال لی ناگادار ده‌که‌مه‌وه . که هه‌والیکی به‌ په‌له‌ی لی بکریت . یان نه‌کریت . یان دواتر له‌ گه‌شته‌کانی تری هه‌والدا دابه‌زیت. یان هه‌ندی جار هه‌والیکی په‌له‌ی لی دروست ده‌کریت ، راسته‌وخو دوا‌ی گه‌یشتنی تیکست و فیدیوی هه‌واله‌که من داخ‌لی ده‌که‌م نه‌گه‌ر خوم کاتم هه‌بیت ئه‌وه دارش‌تنه‌وه‌ی بو ده‌که‌م نه‌گه‌ر نه‌بیت ئه‌وه ره‌وانه‌ی په‌کیک له‌ هه‌والسازه‌کانی ده‌که‌م. هاوکاتیش سه‌رنوسه‌ر له‌ ریگه‌ی ئای نیوزه‌وه ناگاداری تیکستی هه‌واله‌که ده‌بیت . و ده‌زانی کی دارش‌تنه‌وه‌ی بو کردووه . نه‌گه‌ر هه‌واله‌که که‌م وگوری تیدا بیت له‌ رووی زانیاری و فیدیومه‌وه ئه‌وه سه‌رنوسه‌ر هه‌والساز ناگادار ده‌کاته‌وه . هاوکاتیش ئیمه په‌یوه‌ندی به‌ پامیره‌وه ده‌که‌ین بو ئه‌وه‌ی زانیاری زیاتری بخینه سه‌ر و ئه‌پ دیتی بکه‌ین هه‌واله‌که.

The researcher noticed that in the KNN newsroom, there are teamwork groups and group discussions between the journalists within the workplace. The journalists constructing their group discussion were dependent on the value of the news stories and events. The researcher observed that the journalists discussed events, for instance, Kurdish New Year, election events and parliamentary decisions and press conferences with politicians or social figures. The discussions were organised through a collaborative teamwork of journalists. For this purpose, the newsroom members in the KNN created a specific news team to manage and direct the situation of news event.

Regarding the group discussion in the KKN newsroom, the senior news reporter highlighted the effective discussions and conversations taking place between the journalists within the workplace (SNR, KNN). According to the senior news reporter, they are involved in the discussion surrounding news production and accept other ideas from colleagues about news tasks. In his in-depth interview he claimed that:

‘...If I am working as a news writer, I note if there is a good connection between the news crew. This is normal and there is

observed that both the individual journalists and groups in the KNN newsroom are encouraged to conduct discussions and collectively organise their dialogue regarding news assignments. This factor has a positive impact on the productivity of the newsroom production in KNN.

When interviewed, the news reporter in the KNN newsroom mentioned noted that:

‘...If we have a pre-plan for conducting our agenda tasks in the newsroom it is great, especially in-depth discussion that occurs between the news crews to organise the news rundown list. Also, we have discussions about newsletters before broadcasting. This makes our work faster and in this framework, we have some problems, especially technical or editorial aspects of news stories, which we try to solve. For instance, sometimes we do not receive the footage or news video. This creates problems for the news editor and we have wait for a long time to get the story footage. If we don’t have the video for the news story, we use archive footage or a still photo, to create our news graphics’.

(Translated by: Abdulsamad Zangana)(NR, KNN)

بیگومان نه گهر پیش وخت بهرنامه‌ی بو دابنریت نهو چری گفتوگوان ناگاته کاتی پیش
په‌خسکردنی گه‌شتی هه‌واله‌کان . به‌خیراکردنی کارمکان رووده‌دات ، هه‌ندی جار نه‌گه‌پشتنه‌وه‌ی فیدیو
کیشه‌مان بو دروست ده‌کات بو تا له‌فه‌زایه‌که‌وه ده‌گاته کاتیکی زور ده‌ویت، چاوهری ده‌که‌م تا درنگیک
تا وینه ده‌گاته ده‌ستمان ، نه‌گه‌ۆ له‌حاله‌تیکدا فیدیزکه نه‌گه‌پشت نهو کاته وینه‌ی نه‌رشیف به‌کار
ده‌هینم ، گفتوگو نیمه‌هاتوو و بونه‌هاتوو له‌نیوان من و سه‌رنوسه‌ر رووده‌دات.

The everyday discussion between community members generates a wide range of new ideas to improve plans and strategies of news production. Wenger and Lave (COP) argue that the ‘invited membership has potential to create ideas through opportunities to explore aspects of practice together’ (Cassar and Bezzia, 2015, p.398). The researcher observed that the journalists’ discussion surrounding the news practice in the KNN newsroom helps the news crew to

generate new ideas and knowledge related to their practices. The researcher also noticed that this discussion, explanation and interpretation of journalists surrounding the news actions have improved their news practices, specifically the engagement in learning, improved communication and exchanged of knowledge related to issues that they faced in the workplace.

In this regard, the news anchor in the KNN newsroom indicated some essential points in their framework job in the studio. During his in-depth interview he declared that:

‘...There are discussions between journalists and the daily plan maker to develop and improve related to work, helping us to shape the news programme, for instance, the live events coverage. For instance we ask: “We do live broadcasting – why do we participate in the live event? What is the goal of the live event? How do we deal with the situation in live broadcasting?” Actually, we do not have any information about the activities. Hence, it is necessary that the news presenter knows about each step of live events. We should have information about the content of the news script and the plan of the news producer. Also, what is the content of the newsroom plan? How many questions do we have to ask the guest and the number of guests? How many phones do we have in the newsletter? All these elements should be clear for the news presenters in the studio and at the time of broadcasting’.

(Translated by: Abdulsamad Zangana) (NA, KNN)

نەبونی پلان لە کاتی پەخشی راستەوخو ، تو بوجی دەچیتە پەخشی راستەوخو ؟ نازانین ؟ بویە
پیویستە بیژەر پیش ئەوەی بچیتە پەخشی راستەوخو بزانی کە چی دەکەن ، سکریپتیان پی بیت
بزانی ئەوە پلانە ی کە لە سەر سکریپتە کە بوی کراوە چییە ؟ چەند هەوال دەخوینتەو و چەند
پەیوەندی تەلەفونی وەردەگرت و پرسیارەکان چیین ؟ . چەند میوانی هەیە ، هەموو ئەمانە
پیویستە رەچاو بکریت لە کاتی پەخشی راستەوخودا، ئەمەش بو ئەوەی بیژەر بەرچاوی روون بیت لە
کارەکە ی خویدا.

The respondent argued that the pre-plan for live events and discussion has a great impact on the ability of the news anchor to present the news (NA, KNN). In this context, the job of the news organiser in the KNN newsroom plays an important role in providing the journalists and news anchor with more generate awareness for running their news procedure, Especially, for news coverage such as finding guests and managing news operations in the field (NO, KNN). The researcher remarked that the news organiser has a wide range of relationships with news producers and coordinates with the news crew. Specifically, to find the necessary news guests, conduct research and provide the news resources to crew and participants directly within the activities. When interviewed, the senior news reporter in the KNN newsroom, described his key job in the newsroom:

‘... The key task of the newsroom organiser is based on contacting the guest to join their studio activities. Organising the news rundown list, checking the content of the news script, and connection between the news crew at the time of broadcasting. The news organiser discusses with the news producer to select specific topics for the guest. There is contact with the news sources to obtain more information about the news or update the content of news events’.

(Translated by: Abdulsamad Zangana)(SNR, KNN)

ریکخه‌ری هه‌وال : کاری ریکخه‌ری ژوری هه‌وال بریتە له ریکخستنی په‌یوه‌ندی به میوانه‌گانی ناو هه‌وال و دوزینه‌وه‌ی میوان به راویژکردن له گه‌ل سه‌رنوسه‌ر بو دیاری کردنی که‌سه‌گان. په‌وه‌ندی کردن به سه‌رچاوه‌ی زانیاری ر و وه‌رگرتنی زانیاری زیاتر له باره‌ی رووداوه‌گانه‌وه‌.

The respondent declared that the news organiser has a key role in the process of news production and shapes the news package (SNR, KNN). The position of the senior news reporter in the KNN newsroom is important to collaborate effectively with the participant in the workplace activities. In addition, the skills, knowledge and experiences of the senior news reporter are key to bringing

more stability to the newsroom network (ANT) and programme of actions, particularly, the connection between the human actors outside and inside of the newsroom in live events. Through this position, the senior news reporter attempts to support the news crew by gathering and using different news resources (SNR, KNN). The researcher noticed that the news producer provides information to the news anchors beforehand regarding what is on the live coverage and what the news rundown list contains. They discuss the key points with the news anchor before he/she goes to studio news and on air.

In an in-depth interview with the news writers discussed collaborative work between the news crew. The news writer noted that the chief news reporter has an important relationship with other members to conduct their practice in the newsroom (NW, KNN). He commented that:

‘...For example, the chief news reporter contacts the news reporter in the field to gather more information about particular news stories. Also, to attend the press conference, live or recorded. He recommends the news reporter ask some questions about the event. Also, the chief news reporter discusses with the news reporter how to send back the information to the newsroom in a quick way, for instance by email or other ways’.

(Translated by: Abdulsamad Zangana)(NW, KNN)

به‌رپرسی په‌یام‌نیران: په‌یوه‌ندی کردن به په‌یام‌نیرانه‌وه بو به ده‌ست هی‌نایی زانیاری زیاتر له سهر رووداوه‌کان یان ناماده‌بوونی له کونگره‌ی روژنامه‌وایی کوت وپر ، هه‌روه‌ها شیوازی پرس‌یار کردن و دانانی پلانی کار له شیوازی ته‌غتی‌ه‌کردنی رووداوه‌که، یان په‌له کردن له ناردنی زانیاری هه‌واله‌که له ریگه‌ی ئیمایله‌وه یان پرس‌یار کردن له باره‌ی فیدیوی هه‌واله‌که که که‌ی ده‌گاته که‌ناله‌که.

The researcher observed that the daily meeting of the council management of KNN Channel roughly regulated the content of the daily plan regarding the newsgathering operation. The researcher discovered that the everyday conference of newsroom is conduct by the directors of sections, including the directors of news, art, technical, graphic and administration sections. Through

this morning meeting they attempt to select the key goals of news practices and make decisions concerning the news-covering events. The news producer interviewed in KNN Channel offered a positive point surrounding their newsroom conference content, stating that:

‘...The daily council meeting draws the main goals and policy of television, which include news coverage and news programme. Through this meeting we define the content and the form of the news programme. It is conducted at 09:00. For example, the free-Mic is a news programme we discussed there and about other newsletters’.

(Translated by: Abdulsamad Zangana)(NW, KNN)

کوبونهوهی ئه نهمه نهمی بهریوه بردن سیاسهتی که ناله که دیاری دهکات ، ئهوانه ی له کوبونهوه روژانه ی خویان ناوه روکی بهرنامه ی روژ دیاری دهکات که روژانه له سهعات ۹ بهیانی ئه نهمی دهدهن . بو نمونه بهرنامه ی روژانه ی ئیستا ماموستا چولی + ناوه روکی ههواله کانی گهشتی سهعات ۱۰شهوه . بهشیک له ناوه روکی ههوال و بهرنامه کانی تر .

The researcher remarked on the form and type of teamwork in the KNN newsroom, in which they have two types of teamwork, including indoor teamwork in the newsroom and outdoor teamwork in the events field. The interviewed news chief for the KNN Channel, noted that they create group work as part of their everyday routine, specifically in conducting coverage of special events that have great news value. He stated that:

‘...the news producer divides the news tasks between journalists. For example, during an election campaign, the news producers decided to create a specific team to cover this event and to divide the duties between the newsroom members in order to manage and control the operation by them. In the morning, I contact the news crew to find out about news updates and check everything. Then, in the afternoon shift I put all the information on the billboard to organise, make plans and put in the rundown list.

After all tasks are done at 16:00, we start the nighttime newsletter’.

(Translated by: Abdulsamad Zangana)(CN, KKN)

گروپ ورك زياتر له رووداونه تايبته بهكاردههينن كه ههول ددهيت زياتر ئيشهكان دابهش بكن بو نمونه به تيميك تواوگهري يهكتر دهبين بو نمونه رووداويك بيت . بو نمونه ههلبزاردنيك شتيك دهبيت، كارهكان دابهش دهكهين. به سهر ههوالسازهكان بو نمونه هاوريك دهنيرينه دهرهوه وهك پهيامنير يهكيكي تر دهنيرين ، يهكيكي تر دهنيرين پرسيار بنوسي ، كهسيك رادهسپيرم ههواليكي لي بكات يان يهكيكي تر راپورتي لي بكات بهم شيوهيه بو نمونه بهيانيان پهيوهنديان پيوه دهكهم بزائم چي روودهات ئيوارانيش كه ديم له سهر بوردهكه ههرچي ههبي دهنوسم و پلاني بو دا دهنين ، دواي ههموو كارهكاني سعات ۴ واتا گهشتي سعات ۴ ئيواره ناماده دهبيت پاشان پلان دادهنين كه له دواي سعات ۴ چي بكهين و پلاني ئيمه چي بيت. نهوهي كرابيت پيوستي ئپ ديت بكريتهوه و بير له چارهسهرى نهوه كاني تر دهكهينهوه يان وهك پيويت كاري له سهر نهكراوه شتيك رويشتهوه به ههوال رهنكه له گهشتهكاني تر بكريته راپورت.

The researcher observed that there is one journalist in the KNN newsroom tracking the news worker's everyday practices to establish how many news items are produced and the amount of productivity of all journalists in their shift patterns. The researcher noted that the key tasks of this journalist writing up a report surrounding the news crew team activities to news director and pass the problems of the journalists to administration. Furthermore, the automation system provides the practitioners with statistical data surrounding their news production and records relating to daily work. When interviewed the news producer in the KNN newsroom, confirmed that the statistical data is important and useful within the news process production, especially for finding out about the work ability. Also he mentioned that in the initial stages of the automation system, 'we have one journalist who supports the news producer's daily work, weekly and monthly statistical information related to the news activity' (NP, KNN).

In summary, the changes of new technology have provided journalists with more interactive tools to conduct their tasks and activities in an efficiently.

Particularly, improvement has been seen in the engagement of workers to their projects, such as sharing knowledge, obtaining their identity easily and also, supporting the process of learning in the newsroom community (COP)(Wenger, 1998). During the journalists' interviews in KNN Channel, the majority of news practitioners focused on the role of the automation system in encouraging them to work quicker. This aspect of technology change allows the newsroom structure to redesign and reconfigure the news practice that is based on the automated systems. Thus, the community in the newsroom becomes more productive and builds more collaboration between members of the news crew.

8.5 The news producer

The executive news producer in the KNN newsroom plays a big role in managing the process of news production workflow, particularly, the decision making regarding the news stories, breaking news, negotiating about the studio host and covering news events. The news producer directly participates in the news activities in the newsroom. Also, the automation system of the newsroom provides great facilities for the news producer to gain information relating to the news practice, controlling the process and knowing about the duration of the news programme production.

In KNN Channel, the news producer has a role to determine the duration of the news stories, news programmes and news package form by negotiating with other news crew. The news copy editor, when interviewed, noted that:

‘...in the KNN newsroom, our practice is based on regulations that determine the duration of news packages between 40 to 50 seconds, as standard. However, the news producers have the authority to make the length of news items longer or shorter, dependent on the news producers' goals, the value and the importance of news stories’.

(Translated by: Abdulsamad Zangana) (copy editor, KNN)

یان هەندی جار سەرنوسەر زور مەشغولە پیم دەلیت سەرپەرشتی (CG) بکە ، زور کات من سەرقالی کاری هەوالسازیم لە نیوزرووم ، هەندی جار ئەوەند سەرقالی کاری هەوالسازیم کاری پەیامنیریم دەبیته کاریکی لاوەکی .بویه زور قورسای دەکەوێتە سەرم لە کاتی کارکردنم لە ناو نیوز رووم. بە تایبەت کاتیک بزانم کە ستافی هەوال زور سەرقالن ، کاریان زور لە سەر بە بی ئەوەی پیم بلین من هاوکاریان دەکەم. بە هەمان شیویەش ئەوان ئەوە مراعات دەکەن کە من کاتیک سەرقال بێم بیان بلیم کاتم نییه بە ئاسای وەردەگرن.

The researcher noted the news producer's position is placed in the centre of the newsroom and has great high authority in the workplace. In the structure of the KNN newsroom network, the position of the news chief is located at the top of the news team hierarchy. The news chief in the top position in the newsroom, is then followed by the news producers, executive news producers, the news editor and then other news crews (NP, KNN).

The researcher noted that the news producers are involved in a wide range of newsroom tasks, activities and news practices. The researcher remarked that the news producer attends many workplace areas in the newsroom in order to monitor all processes of news production and provide the news crew with feedback about their practices and how they follow the key goals of the newsroom network. The chief of news in KNN Channel referred to the role of the news producer in news operation processes in the network, stating that:

'...always the news producers attend in the control room at the broadcasting time, in order to determine any problems that face the news crew. They take notes to inform the chief of news later, for example news content mistake, and sometimes when we face technical problems, we inform the head of the art department. Also, if the problem relates to the content of news, we send it to the news director'.

(Translated by: Abdulsamad Zangana) (CN, KNN)

هه‌میشه سه‌نوسه‌ری له ژوری كونتروله له كاتى په‌خشی هه‌وال بو ئه‌وه‌ی هه‌ر هه‌له‌یه‌ك رووبدات ئه‌و
 ی خوی بینوسیوه‌ك تیبینی هوکاره‌کانی دهنوسی دواتر به‌پرسی هه‌وال ئاگادار ده‌کاته‌وه له‌و هه‌له.
 هه‌ندی جار هه‌له ته‌کنیکی بو به‌شی ته‌کنیکی و هه‌له‌ی ناوه‌روکی هه‌وال و بیژهر بو لای به‌پرسی
 به‌شی هه‌وال.

The researcher noticed that the news producers have a central role in looking after all processes of news production workflow. For instance making the network more stable (ANT) and solving the problems (COP) that the journalists face (see Callon, Translation stage, 1986). The researcher remarked that the key problems faced by the news producer include the difficulty of finding a suitable guest for the studio, to provide on going comment and analysis of news events. During the men news producer's interview in the KNN news network, he offered information related to the situation of the news producer, claiming that:

‘...the newsroom duties are difficult, especially when the breaking news arrives and we are unable to manage daily tasks appropriately. We can not classify all daily work in a suitable form and shape particularly in the situation of emergency news events’.

(Translated by: Abdulsamad Zangana) (NP, KNN)

کارگردن له ته‌له‌فزیون زور قورسه . ره‌نگه نه‌توانی به باشی هه‌موو ئه‌رکه‌کانی روژی دواتر پلانی بو
 دابین، ناکریت هه‌موو شته‌کان به به‌رنامه و پولین کردن کرابیت. کاره‌کانی ئه‌و روژه بو نمونه ئه‌گه‌ر
 به‌رنامه ریژی کرابیت به‌لام به هوی رووداویکی کوت و پر هه موو شته‌کان هه‌لده‌وشیته‌وه.

The researcher observed that running the news channel station 24/7 places many barriers and obstacles in front of the news production workflow. The 24/7 news operations in particular need a big news crew and many newsroom members, for instance the news producers, editors, reporters and technical teams. Therefore, the lack of news crew in the KNN newsroom makes the news practices difficult and results in an unstable network.

The discussion has shown the significant role of the news producer as an example of a focal actor or key news gatekeeper in the newsroom. The news

producer has an indispensable role in determining the final format and shape of the news production. Also, they are involved in a wide range of news actions and activities in the workplace.

8.6 The news editors in the newsroom

The news writers or news editors have a wide range of responsibilities in the process of news production workflow, including the task of supervision for news editorials, content of items and shaping the news visually altogether as one package. Through this role the news editors establish their relationships with other members of the newsroom. The news writers have a good network connection with other people who are involved in the process of newsgathering (input) and the news managing (output) of the news programme.

In the case of KNN's newsroom, the news editors play a major role in the news production operation. The researcher observed in KNN Channel that the news writers are able to shape the news items and manage the news programme more efficiently by using the automation system. For example, the researcher noted, one of the old news editors' activities in forming the news story and how deal with news elements in the package. The automation newsroom allows the news editor to drive the news script for the news crew, select the footage and write up the news ticker. However, the researcher noticed that some of the news writers have limited experience and skill in dealing with uses of the automation technology, Avid, especially the newcomers. The chief news reporter, when interviewed in the KNN newsroom, described the skills of journalists in dealing with the system as follows:

‘...any news editor should be able to use the newsroom automation system. The daily news practice obligates them to understand the system and obtain experience to use the system in order to manage their news practices’.

(Translated by: Abdulsamad Zangana)(NR, KKN)

ئەو ھەۋالە سازى كى سىتەمەكە بەكار دەھىنى ئەۋە ناچار دەبىت ھەر دووكى بەكار بېھنى ھەمە
فېدو ھەم تەكىست واتا ئافىد و (I news) بەكار بېھنى و راپەراندى كارەكانيان.

The researcher noticed that the news editor in the KNN newsroom, especially the newcomers to news editing, face key challenges and barriers in their practices; especially incorporating and using the computer system in their news workflow, For instance, the mistake by the news editor in matching between information and footage when using the digital desk. The researcher remarked that the workers who had trained in KNN Channel and others who studied at Media College, have good skills and understanding when dealing with the automation system.

In his interview, the news producer emphasised that the majority of the news editors that work in the newsroom have been to university and obtained a professional work qualification in the field of media. During his interview he commented that:

‘...The academic training provides them with a reasonable level of skill and experience to use the computer, specifically the automation system, Avid. Almost all the news workers in the KNN newsroom learnt to use the automation system by everyday practice, asking questions of their colleagues, exchanging experiences; daily exercise allows them to be able to deal with the system for conducting their duties. Further, the newsroom journalists rarely join in the training courses about technology usage. For example, I was taught over four days without participating in the workshop. Already any of the news editors coming to the newsroom have been examined in their experience, skills and estimation of their abilities to work in this environment. However, in my opinion the newsroom system is very easy to use, it is just based on practice and exchange of experience between the news crew’.

(Translated by: Abdulsamad Zangana)(NP, KNN)

به‌شيك له هه‌والسازەكان خويان دەرچوى زانکون خويان پيش وخت شارەزايين هه‌يه لهم بواره. به‌شيكيان که هاتونه‌ته ئيره فیری به کار هينانی کومپيوته‌ر بونه به تايبه‌ت به مومارسه‌ه فیری به کارهينانی سيستمی ئای نیوز بوونه. له ماوه‌ی ته‌نها چوار روژدا ده‌توانن فیر نه‌و ئايکونانه‌ه ببن که پيوستن بو کاری روژانه . به‌لام پيش وخت هه‌ر که‌شيك ديه‌ ئيره بو کاری هه‌والسازي نه‌وه تايکرنه‌وه‌ی بو ده‌گريت به‌ فلته‌ری تايکرنه‌وه‌ه تيه‌ر ده‌بيت. به‌ رای من به‌ کار هينانی نه‌م سيستم زور ئاسانه‌ه. هه‌ر به‌ کاری روژانه مومارسه‌ی به‌کيه‌ت فیری به‌کارهينانی ده‌بيت له‌ نيوان ٤ بو ٥ روژ فیر به‌کارهينانی ده‌بيت.

The researcher acknowledges that the high level of qualifications and professional skills provides the journalists with the ability to conduct their job in an adequate manner. The researcher noticed the journalists that graduate from university and have an academic media background in the KNN newsroom had extensive skills in dealing with the automation system and they are more active in their positions. The news producer in KNN Channel, during his interview, positively referred to the skills of the news editor, arguing that the news editors in KNN have reasonable skills in conduct news editing, in particular dealing with their news stories, organising structure and updating news processes (NP, KNN).

In the newsroom, the researcher remarked that the journalists within their workplace have great space to discuss things and to therefore develop mutual engagement in their news projects. The researcher noted that negotiation between the news editor, news producer and news anchor is the best way to generate new ideas and thoughts about how they shape the news packages. For instance the editorial meeting and discussion with the news crew related to the explosion story Baghdad-Iraqi helped to set up all aspects of the event, including interviews, report, graphics and by providing analysis. Hence, this also provides them with a great opportunity to construct their relationships and develop their newsroom community (COP)(see, Wenger, 1998).

The chief of news at KNN Channel, indicated the great deal of negotiation that takes place amongst the journalists in the newsroom. Also, he noted that the news editor always asks the news producers about their assignments and also

needs feedback to estimate the content and the form of the news stories. In this manner, the news producer emphasises the good relationships between these news crew in exchanging ideas and information when in the process of creating news items (NP, KNN).

The researcher perceived that the news producers have many tasks in the KNN newsroom. One such task is the responsibility of searching for news distributed among the news crew, to create and shape it. Also, the news producer is in charge of monitoring the production management, collaborating with news crew, reviewing news, organising the rundown list, writing stories and researching new topics.

The researcher asked the news producer how they selected the position of news production in the newsroom. He replied, the choice of the news producer of group work leader in the KNN newsroom is based on the history of news practice, skills and experience of the candidate. In this way, the news producer's enrolment (ANT) in the network is constructed on the understanding of their job, newsroom policy, how they deal with the shaping of news items and their familiarity in dealing with news and workplace members (NP, KNN).

These illustrations provide vital insights into the news editor's role and the news producer's role in the newsroom, especially in conducting news practices in the automation workplace. The participants believe that the key aspect of news practice is the demonstration of professional skills and qualifications in order to conduct excellent news practices in the automation framework.

8.7 The journalists experience and identity

The news practitioners' experience is a fundamental component in the process of news production at KNN Channel, particularly, regarding use of the automation system and multi-platforms of the newsroom. The high level of journalists' skills, knowledge and expertise offers them more opportunities to interact and learn within their circumstances. It provides the journalists with a unique talent in managing their news practices and relationships. In this manner, Wenger (COP)(1999) argues 'the identity as negotiated experience,

community membership, learning trajectory and nexus of multi- membership' (Gu, 2012, p.170).

The researcher noted the circumstances of the news practitioners' experience of everyday newsroom life. The researcher observed that the personal experience of journalists was vital in managing many aspects of news operations. For instance the useful educational knowledge of journalists helps them to have more engagement in teamwork, involvement in group discussions and exchanges of experience with other members. The researcher noted that the old journalists have their own news practice experiences that are more effective and active than the new journalists in the KNN newsroom.

In this way, the copy editor who checks the language of news stories, during his in-depth interview, showed a negative opinion connected to professional training in KNN, mentioning that:

'...I did not participate in any academic course about style of writing in the television news practices. In my personal experience, I learned how to deal with the news, especially the content, the language and the style of writing. By regular practice I obtained my experience and skills, which style of writing and language is suitable to television news, which is different to other media channels etc.'

(Translated by: Abdulsamad Zangana) (Copy editor, KNN Channel)

تا ئیستا هیچ کورسیکی ئەکادیمیم لە بواری شیوازی نووسین بو تەلەفزیون نەبینیوه ، بە پی ئەزمونی
خوم کارەکانم نەنجامداوه ، لە رێگەی ممارسەوه خومە زیاتر هەستم کردوووه کە زمانی نووسین بو
تەلەفزیون جیاوازه لە زمانی کەنالهکانی تر .

The researcher observed the key requirements within the policy work in KNN Channel, in which they focus more on the experience, skills and expertise of journalists to be able to work in the newsroom, particularly the skills of usage of

technology tools, visual storytelling, leadership abilities, ethical knowledge of journalists' practices and editorial talent.

The KNN Channel administration considers the level of journalists' experiences and their work skills when they apply for available jobs in the channel. The chief of news conducts the test on the new journalists and pays a lot of attention to selecting them to work in the channel and join in the newsroom activity (CN, KNN). The evidence of the KNN work contract in the newsroom refers to the fact that the new workers have two months' probation work before the final decision is made for them to work in the newsroom. If they fail in this probation, the administration does not accept them to begin work in the channel. In this period, they observe the skills, experience and quality of the workers in the process of news production. In regard to the assessment of the ability of journalists in working in the KNN newsroom network, during his in-depth interview the chief of the news department discussed that:

'...the measure and assessment of the skills of new worker begins before they come to the newsroom. For example, when we accept the news writer to work in the newsroom, it is based on testing and CV application form. After a period of time, we focus on their skills of work, experience and relationships. Then, we decide whether they will work in the newsroom network. After obtaining their skills in the newsroom and understanding the news practices, we decide if they have the ability to become a news producer. These aspects are based on the activities of the journalists in the news operation. If we know they have a good level of understanding of their work, we decide they can be a news producer, especially if they have experience in managing projects or language and translating Arabic text abilities'.

(Translated by: Abdulsamad Zangana) (CN, KNN)

دواتر هه والساژ وەرگیره کان پیکهاتوو. پیاوړه کان و هه لسه ننگاندی بو نه و که سانه ی ده که ی پش نه و ی بڼه سرنوسه ر بو نمونه نه م که سانه ماو هیه کی زور له یواری هه والساژی کار ده که ن دواتر نیمه ش بریارده دین که بڼ به سرنوسه ر به تایبته که بزانی له ئاست بهرپرسیاریتی کار کردن له ناو نیوزو وودا بو نمونه کاتیک هه والیک و مرده گریته له زمانی عه ره بیه وه ته نه ا و مرگیران نه بیت به لکو به دوا دچوونه و ی بو ده کات و زانیاری زیاتر کو ده کاته وه له سه ر نه و هه واله.

Additionally, in terms of KNN newsroom requirements there is practical experience in the field of news production for every journalist. This includes experience in news techniques, newsgathering, decision-making about the news story content, like graphics, sound bites and interview clips and footage shots. The researcher remarked that the KNN administration are looking more for highly practical skills of production news for the journalists that they want to employed in the newsroom. For example, the researcher observed that they require skills from the worker to be able to operate their rolling news services 24/7. In this manner, in his in-depth interview, the news graphics designer in the KNN network indicated the weakness aspect of the journalists in dealing with graphics elements in their news practice. He noted that:

‘...The graphics crew contact the news department for producing graphics items. We determine all plans and shapes of the news graphics to be created. Then, the graphics department will implement the plan and this takes a long time, for instance, creating one graphics item takes five hours’ work’.

(Translated by: Abdulsamad Zangana) (The senior news graphics designer, KNN)

ستافی گرافیک په یو مندی به وانه وه ده که ی هه موو پلانی گرافیکه ی دیاری ده که ی و به شی گرافیک ته نه ا جی به جی گردنی بو ده کاته زمو نه مان هه یه له یواری گرافیک زور کات ده ویت ره نگه پینچ سه عات ته و او نه بیت.

The researcher discovered that the news crew have limited skills and experience in producing and treatment of a piece of news graphics or guiding the designer in this task. In this circumstance the graphics designer has a key

role in creating the shape of the graphics item, which depends on their experience and understanding of the content. However, the KNN newsroom has other problems, such as a lack of professional workers in the field of graphics design and producing. This circumstance creates work stress on the news producers and newsroom practitioners when they want to present the information in a visual aspect. The manager of the art department in KNN Channel referred to the lack of graphics designers and work stress when they produce graphics for the news story. In this regard he stated that:

‘...This work stress comes from the lack of journalists in the workplace, which impacts the participation of journalists in the workshop and other activities. This limits our ability to send workers to join in the course/training or workshop about news practices, dealing with news graphics and producing info graphics, for example sometimes the training takes more than three months, it is a very long period for us. Further, fewer professional news practitioners in Kurdistan are able to deal with the new automation system’.

(Translated by: Abdulsamad Zangana) (The manager of art department, KNN Channel)

له یه کهم ستافی که مان ههیه ناتوانین کهس بنیرین بو خولی راهینان له دهرهوهی ولات ئهمهش بنیرین
بو خولی راهینان له دهرهوه ئهمهش گرفته بو ماوهی سی مانگ یان ٤٠ رۆژ ئهم کاتیکی زوره .
دووهم : خه لکی زور پروفیشنال نییه له کوردستاندا هورسه له گهل ئهم سیسته مه لای خومان
بگونجی .

The researcher remarked that in Kurdistan generally there is a lack of professional media operators, news workers, editorials, and planners and graphics designers. The researcher believes that these aspects have directly made the news production workflow face many issues and difficulties.

The small number of news practitioners in the KNN newsroom has an impact on the news practices and work in the news production workflow framework. This

aspect creates more work stress on the newsroom members. During the in-depth interview of the news director in the KNN control room, he indicated the nature of the tasks and the stressful situation of news practice in their area:

‘...In the KNN control room the directors have two jobs, which are switcher and director. In other channels the directors just work as talkback, which provides the worker with instructions to manage their news operation. We suffer from a lack of professional directors. The key reason for this situation is the universities and the academic field of media studies do not facilitate a high level of practical skills and experience to work in the control room. The people that work here have learned this job by practice’.

(Translated by: Abdulsamad Zangana) (CND of control room, KNN)

خوی وانییه له ههموو کهناله کاندایه سهیجهر کاریکی سویجهر و (director) جیایه، به دهرهینه تهنه به (talk back) هسه دهکات بهلام لای نییه وانییه نه سیسته مه لای نییه سه رکه و تن ناهینی چونکه نه وانه ی که لیره له راگه یاندن کار دهکهن زور پروفیشینال نین له ههموو بواره کانی به تایبتهت اخراج به خویندن نه هاتوو فیری نه کاره ببیت به لکو جرفیه هاتوو و ههزی گردوو به بیت به دهرهینهر بووه . کونترول روومه کانی (KNN) شه شه پوستی تیدایه دهرهینهر که خوی

According to these explanations of the fieldwork notes and interviews, one can infer that the skills of journalists in using the automation equipment are key factors in bringing the stabilisation of the news production workflow; specifically, the skills and abilities of news practitioners to create teamwork and share news projects with their community network.

8.8 The skills of the news worker

This section of the analysis will focus on the key characteristics of the professional skills, experience and knowledge of journalists who work to lead news projects in the digital automation newsroom. It will discuss how far newsroom practice has undergone change and furthermore how these changes

have impacted on the identity of news workers and their professional skills in dealing with the automation system.

The senior news reporters in KNN Channel claim that new technologies provide the journalists with more opportunities to understand their domain and to act with other workers in the newsroom network (SNR, KNN). Latour (2005) observed that the 'human social skills play a role in smoothing out translation work' (Rydin and Tate, 2016, p.7). This development brings with it new styles of news practice that may drive improvement in the skills of news workers. Previous research has found that the majority of journalists that used the automation system in KNN Channel agree the new tool contributes to improvement in their professional skills and the content of news stories (Hamid, 2013).

The news organisation pays attention to journalists' skills in order to reconfigure, redesign and construct a more interactive environment. This movement encourages the journalists to develop their professional practice in the newsroom community; mainly, by using new workstation computer systems. The researcher observed the essential role of the news producers in KNN's newsroom to encourage and provide the journalists with help, support and instruction to conduct their actions. For example, the researcher noted in the newsroom the news producer talking with news editors to develop their work especially taking more care on the editorial aspect of the story. In the context of the KNN newsroom "covenant", it was noted that the news editors and correspondents should have full commitment to the key principles of conducting professional news practices in the newsroom (Covenant of the KNN Channel, 2007). Further, the researcher observed that KNN members are more likely to be committed to act on professional manner in the news practices, by following standard practice than the journalists in the GK newsroom. With respect to this, the researcher found that journalists follow the instructions of news producers and apply key principles of the newsroom stylebook that are determined by the channel to cover news. The researcher noticed that the news workers follow the instructions of the news producer in their activities. In informal interviews during coffee breaks the researcher asked the senior news

reporters and news editor in KNN Channel which skills are required from the journalists. He claimed that the journalists should have experience, knowledge and skills in using the automation system (Avid) in their everyday news practice (SNR, KNN).

The journalists in the KNN newsroom predominately interact with the computer to produce news items. This requires the individual workers to have relevant experienced in order to interact in an appropriate way. Wenger (1991) found that the intellectual skills are emphasised as an essential part of individuals' abilities to feature in the community (Hull, 1997). The skills of journalists are one of the most vital aspects of the newsroom community, allowing them to engage with and manage their news production projects. The researcher noticed that the news workers in the KNN Channel appear to have reasonable experience and multiple skills in dealing with news packages. They appear active in dealing with the automation system to create news items and flexibility in online editing of the news. In this respect the senior news reporters network explicitly describe the skills of journalists and news practice in the following statement:

'...I worked as a news writer, now I am responsible for the correspondents network in KNN. At the same time I participated in the newsroom activities and supported the news crew by engaging with their activities, especially in the field of news writing, editing information and producing. In this manner, my task as director of news correspondents focuses on the gathering of local news, the news editing process, checking stories and communicating with news reporters and others, feeding sources of news that come to the news team or the stories that we make inside the newsroom'.

(Translated by: Abdulsamad Zangana)(SNR, KNN)

ماوهیهکی زوره وهك ههوالساز كارم كردهوه و له ئیستا دا وهك لیپرسروای بهشی پهیامنیران ، كاردكهكم ، وهك له ئیستا بهرمپرسی پهیامنیرانم بهلام هاوكاتیش هاوكاری ستافی نیوزم به تایبته له كاری دارشتهوهی ههوال ئهمه به دهر له كاركهی خوم.

زیاتر ههوالی ناوخو دهكم به تایبته ئهو ههوالانهی له لایهن پهیامنیرانهوه بوم دهترین.یان ئهو ههوالانهی كه خوم ههلهستم به ئامادهكردنی له ناو كهناكه یان دهرهوه .

The researcher observed that the mutual engagement (COP) with, and sharing of, projects of the journalists are the main component of the everyday practices in the KNN newsroom. The researcher noticed the everyday routine of the news workers in the automation system, includes the preparation of footage, audio, sound bites and news story content. In this way the newsroom journalists become practical managers of many elements of news stories and objects within the network. Rydin and Tate (2016) (ANT) claim that the 'enrolment requires translations that provide highly context-specific equivalencies combining human skill and the configuration of objects that are responsive' (Rydin and Tate, 2016, p.7). Wenger (1998) (COP) argues that the workers' skills of learning and obtaining experience 'depend on opportunities to contribute actively to practice of communities that we value and that value us to integrate their enterprise into our understanding of the world' (Wenger, 1998, p.227).

Wenger (1998) (COP) argued that social value helps the community members to establish the workflow that is best for their practice and support socialising in the community (Wenger, 1998). The journalists are required to have skills and experiences to deal with essential factors of creating news stories and also, to manage their relationships with other peers. For instance, the journalists' skills in use of shots, organising footage and providing information regarding the visual aspect of the news are crucial skills. In this context, the senior news reporter in KNN draws his conclusion that journalists have experience to conduct their news practice and engage in the procedure of news operations. He commented that:

'...I have experience in recognising the video shots, especially when I conduct my editing operation. I have attention for choosing a good shot for news items. I always advise the field reporters to concentrate on the best camera shots for their news report. Also, I provide the newcomers with knowledge to deal with the camera shots in suitable ways and think about the visual aspect of news stories carefully, because 85% of television consists of visual aspects. Sometimes we face problems, especially when the footage is bad. In this case we cover the news as short news and do not make reports when the footage is less than required to construct the news report. In this regard, we attempt to treat the ideas by using graphics, still photos and other visual aspects'.

(Translated by: Abdulsamad Zangana) (SNR, KNN)

که میک شاره‌زایم هه‌یه له‌گرتە و‌زینە ، له‌کاتی مونتاز راپورتیک گرنه‌گ به‌وینه‌کان د‌ه‌دویت، بو‌ن‌مونه ، کاتیک په‌یام‌نیره‌ د‌یتە لای م‌ن وه‌ک به‌رپرسی په‌یام‌نیران بو‌کارکردن سه‌ره‌تا ده‌هینریته‌ لای خوم بو‌ده‌ست پی‌کردنی کاره‌که‌ی ، رینمایان ده‌که‌م که‌گرنه‌گی به‌وینه‌ ب‌ده‌ن له‌کاتی ئاماده‌کردنی راپورتی ته‌له‌فزیونی . له‌ته‌له‌فزیوندا له‌ ٨٥٪ ، وینه‌ پیک ده‌هینی . بو‌ن‌مونه هه‌ندی جار له‌هه‌ندی شار ریپییوانیک هه‌یه ، به‌لام کاتیک ته‌مشای وینه‌که‌ی ده‌که‌ین ئه‌و کاته‌ ده‌بینین وینه‌که‌ زور خراپه‌ بویه هه‌والیکی کورتتری ئی دروست ده‌که‌ین وینه‌ لای م‌ن له‌هه‌والسازیدا ته‌حکوم به‌هه‌واله‌که‌ ده‌کات که‌باش یان خراپه‌.

The researcher observed that the automation system, Avid technology, was the standard for communication in the newsroom and requiring the news crew to have expertise and skills in order to use it. Also, the researcher noticed that the automation system provides tools to the news workers, includes setting up much of the interactions, interconnections, functions, databases and communication services among the news workers at the network. The researcher observed that through their activities in the network, journalists were able to construct and deal with both the human and non-human aspects. This means the action by this software system is based on the standard

regulation of *enrolment* (ANT) of users in the network. The automated system allows the journalists to follow the news managers' instructions in order to achieve their key goals.

An interview with the senior news reporter outlined some negative aspects regarding the level of use of the Avid system in the KNN newsroom. In his opinion, he argued that:

'...I have expertise and skills in using the automation system, Avid, in my daily work and managing my daily tasks. If we face any problems or barriers, then our news colleagues provide information. Also, the IT department provides instructions to solve problems that journalists face in the newsroom. The news editors have abilities to use both Avid and the iNews system to make their news stories. However, some of the newcomers to the newsroom have limited experience of using the system'.

(Translated by: Abdulsamad Zangana) (SNR, KNN)

ئەوێ روژانە مەن پێویستەم لە (I news) دەتوانم بە کاری بهێنم تا ئیستا ئەم بەرنامەیه سوخت وێرە ، بەلام ئیمە نازانین زور بە کاربەینی ، بەلام خوشبەختاه ئیمە پێویستی روژانەمان بە کارمان هیناوه ، بە باشی ، ئەگەر رووبرووی هە هەلەیهکی تەکنیکی ببینەوه ، ئەوه بەشی ئای تی چارەسەری بومان دەکات ، لە ناو سیستەمەکه ئەک وەک بەکارهێنان.

ئەو هەوالسازەکی سیستەمەکه بەکاردهینی ئەوه ناچار دەبێت هەر دووکی بەکاربهینی هەمە فیدیوو هەم تکیست واتا ئافید و (I news) بەکاربهیی و راپەراندی کارەکانیان.

The researcher observed that in the KNN newsroom the majority of news practitioners had a reasonable level of experience in dealing with the automation system. In particular the workers is able tracking the news story and shape the production. The researcher detected the action of the news editor when organizing their plan to edit news and watch footage of the event on their computer and i-news. The researcher noticed that the automation system, helped to establish an association amongst the journalists in order to make the process more dynamic and collaborative. For instance the researcher observed

that the news producer in the main news program organized some of the news guests and then discussed with news editor, the news organizer and the graphic designer to shape, and how constructed cover the story.

The digital assets management system of the newsroom is established upon the IBM content manager (Austerberry, 2004, p.332), which provides the journalists the ability to drive the news operations. In this way, the automation newsroom provides the journalists with a high level of access to network and media content. The researcher observed that the newsroom automation system opens up great opportunities to the news workers in conducting their news practices, especially in providing to access to many resources within the network. The researcher notes the actions of the news producer to access the news stories of other colleagues in the newsroom network and when they attempt to conduct the checking and editing, they were able to provide them with feedback. The researcher noted that the system provides the news practitioners with more information and allows them to gain more knowledge related to the specific news items, such as the news editor able to deal with the footage and news information simultaneously and at the same digital desk.

The news anchor, when interviewed, indicated that the majority of the more experienced news presenters have were fluent in dealing with the Avid system in KNN Channel (NA, KNN). The same news anchor claims that they participated in an extensive workshop surrounding the use of Avid, when the KNN Channel launched. He stated that:

‘...The previous presenters of the newsroom have expertise in using Avid and iNews. When KNN Channel launched, the majority of news workers participated in the training course and the workshop to obtain professional skills to use the automation system. However, tainting of this automation system has stopped in the channel’.

(Translated by: Abdulsamad Zangana)(NA, KNN)

بیژمرهگان که له سهرمتای که ناله که وه دهست به کارن نهوان شارهزایان له بهکارهینانی نافید و ئای نیوز ههیه، ئهمهش به هوی نهوهی که سهرمتا بو ماوهی یهک مانگ دهمخریته و رک شوپهوه تا به تهواوی شارهزای له بهکارهینانی سیستمهکه هه بیت.

The researcher clearly found that the newcomers have less experience and skills in dealing with the automation system within their everyday news practices. The researcher noticed the news producers in discussion with the recently employed news editor about the uses of the system in their news practices. In other words, as Hamid (2013) highlighted the journalists in KNN Channel need to undertake training courses to use the automation system in order to obtain a high level of production quality. The training would improve the relationship between the technology and the journalists in order to reduce the time, cost and effort of workers in the field of news production. In addition, the researcher observed the news practitioners needed to attend workshops on the use of the automation system and newsroom culture, in order to develop and improve their skills of news practices. An example of how this will be effective is described in this following situation, the researcher noticed the recently employed news editors and how they deal with the system and what they required to improve their skills in the new environment of work. The channel should plan to create and run the workshops surrounding the method of adopting and applying the automation system of the newsroom in their production workflow, especially with upgrading the new version of the system. Regarding the use of the Avid system and skills of journalists, the senior news writer in KNN Channel, during his interview, stated that:

‘...in 2008, KNN Channel launched the use of the Avid technology system in the newsroom. At that time, the company established a workshop about how to use the system and develop the abilities of news workers. However, when I gained employment in the newsroom, I obtained the information from other news workers that had participated in the workshop and then I learned how to use the system by practising and daily work without being involved in the training courses’.

له سالی ۲۰۰۸ مه به سیستمی نای نیوز کار دهکهم ، من نهو کاتهی که هاتم ورك شوپی تیبهت به نای نیوز تهواو ببو . بهلام زانیاریهکانم له دمستی دوو وەرگرت به تایبهت نهوانهی لهو ورك شوپه بهشداریان کردبو لهو ورکشوپه ، شارهزایهکهی منش تهنها بو نهوه بو که چوون نهو سیستم بهکاربهینم . ب نهزمون فیربووم که چوون کاری روژانه تهواو بکهه.

Regarding the use of all parts of the automation system, the chief of the news department in KNN Channel stated that not as 'many journalists in the newsroom network have full experience and understanding in dealing with all parts of the Avid software' (NC, KNN). They also have less skill in dealing with the programme element of the system in their daily news practices. The researcher observed that the automation system users have difficulty in applying all system icons in the news production procedures, and in this respect the new journalists in KNN are unable to employ all icons. This results in putting more effort into their everyday practices. For example, some of the newcomers cannot use the email function to communicate with other workers, to message their colleagues and send feedback to others.

In summary, this section shows that the professional skills and experience of journalists in the KNN newsroom is an essential aspect of news practice and work in the digitalisation environment. Wenger (COP)(1998) argued 'the mastery of knowledge and skills required newcomers to move toward full participation in the socio-cultural practices of a community' (Wenger, 2009, p.12). However, there are many journalists who believe that the use of a new automation system requires more improvement of news crew skills by creating training courses.

8.9 The visual skills of journalists and news item

The visual components of the news story play a significant role in making an impact on the audience. This aspect is a crucial part of the journalists' tasks and everyday news practice in television. The journalists are able to construct the

news stories and create high quality production (building a visual artefact). An automation system, such as Avid technology, provides the journalists with the facility to deal with the visual aspects of the news item in a typical form and high level of quality. The news producer interviewed in KNN Channel refers to their experience in dealing with shots and news stories footage:

‘...As the news producer, I have information surrounding the shots and news footage. Also, I apply my information in the news production and I consider the visual aspect of news stories. However, I have less experience about shot frame, sizes, movement and function of shots. As a newsroom framework we conduct news practices upon this basis. This aspect is more relevant to the news writer as he/she is responsible for this matter. They edit the information and pictures at the same time. If the news writer requires more footage they will request it from the archives department to make the news items. Also, they coordinate with footage editors to participate in the editing pictures process, if the journalists need more help’.

(Translated by: Abdulsamad Zangana)(NP, KKN)

خوی داوای وینه دهکات له بهشی ئهرشیف و خوی له بهشی مونتاز مونتازی دهکات بهلام نهگهر کهمو
کوری ههبوو نهوه له گهشتی داهاتووی ههوالهکان چاکی دهکات.

من وهك سهرنوسهر بهشيك ناوهكانی دهزانم بهشيك تر بهكاردههينم ، بهلام نازانم وهزيفهيان چييه ،
نهگهر بهكاربهينم. بهلام وهك ئەم سيستم ئيمه كار له سهر ئەم بنهمايه دهكهين كه چوون بو وینه
بنوسين . له راستیدا ئيمه كهتر متابعهی لايهنی وینه دهكهين ، به تايبهت وینهی ههوال چونكه
ههوالساز خوی ئامادهی دهکات و بهرپرسياره له سهر ئەو ههواله.له کاتی ئامادهکردنی راپورت ههوالساز

The researcher observed that within the KNN newsroom the process of visualising of news stories was a barrier to journalists. This aspect requires a range of abilities and skills from news workers in relation to the way of presenting visually, arranging and shaping the news items. The researcher noted that some of the news editor editing the news story could not recognise

the news producers to shape the news story graphics, and how they wanted to change the story by adding info-graphics to the item and provide additional analysis to the news story. However in the room of the graphic designer, the researcher observed the designer alone when working on the item and without liaising with the news editor to monitor the process of the graphics production.

The news writer requires practical skills to deal with the editorial feature, visual form of stories and the content of the news item. As Hamid (2013) points out, the journalists are in agreement surrounding how the automation system, Avid, is contributing to, and supporting, the editorial aspect of news media in the newsroom practices. In this context, the news writer in the KNN newsroom refers to the experience of journalists in organising the editorial aspect with visual elements. In his interview he claimed that:

‘...The skills of journalists and exercise of editorial style for the news stories have a high standard of writing. At the time of the footage editing the journalists have problems and face challenges to conduct their news practices in an appropriate method. They have good skills in editorial aspects. However, they probably, have less experience dealing with video editing operations. The skills of the news workers in both visuals and editorials are at a different level’.

(Translated by: Abdulsamad Zangana) (CNE, KNN)

شارهزای؟ دارشتهوهی زانیاری له ئاستیکی زور باشه و مام ناوهندایه، له کاتی مونتازدا فیدیوکان ههوالسادکان گرفتیان ههیه. رهنگه به باشی بتوانن کاری دارشتهوهی ههوال بکهن بهلام زور کهم شارهزایان ههیه له مونتاز کردنی وینه ، رهنگه شارهزایان لهم ئاسته جیاواز بیت ئهمهش دهکهووته سهر ئهستوی کهسهکه به پله یهک .

To confirm the above statement, the researcher observed that the news workers have reasonable experience and skills in dealing with editorial aspects of the news story, especially at KNN where there is a stylebook of news editing and a copy editor. The researcher has seen the process of news checking by the copy editor and how the news editors follow the stylebook in using suitable phrases

and words in their news stories. However, the researcher noticed that some of the newcomers' needed to improve their news writing and ability to work alongside more experienced journalists in the KNN newsroom.

Overall, this section indicates that the skills of journalists in visualising information and forming the news items are often limited and workers need more understanding to conduct this aspect in an appropriate way. However, the journalists in KNN Channel require high levels of experience and skills in dealing with visual elements of news such as, editing pictures, footage, maps, charts and knowledge surrounding shaping the story visually, particularly in using the automation system facilities that support the worker efficiently.

8.10 Conclusion

This chapter has examined the research questions related to the digital newsroom and journalists practice in the automation network in the KNN channel. Each section of the chapter has intended to describe how journalists behave their everyday life practices and how they deal with automation system in order to produce news in the KNN newsroom network. The respondents demonstrated their viewpoint related to the digital system in the KNN newsroom and the researcher conducted nonparticipant observation for their everyday activity in the workplace. The participants declared that the KNN news worker has problems with dealing the system of newsroom and requires a greater set of skills, knowledge, experience and understanding the tasks in the context of automation system. In this respect, interviewee has been identified essential aspect of visual elements of the news stories and they have comments in their interviews. Also, the journalists in the KNN newsroom network claimed that there is a great deal of interaction between the human actors in their everyday practice and managing their tasks within the workplace.

Other issues have emerged in their interviews; the run workshop training for the new journalists in dealing with the system encourages them to be involved more in the workplace learning. Another issue regarding the Avid system is that it supports the journalists work in an efficient way. In particular, the news

updating, editing process and connection with other news members. Alongside of this the participant journalists in their interviews noted that they need more practical skills and experience in dealing with the situation of news production process.

Beside this, the researcher observed many workplaces inside the channel and the journalists practice tasks within the newsroom network, specifically the engagement of the journalists in their practice, relationships between human actor, mutual engagement, shared project between them and the role of focal actor as an example of news producer in shaping the news package. In this respect the researcher notices that the journalists needs more involves in the workplace learning and workshop regard to the newsroom cultural and automation system.

Chapter Nine: Conclusion

9.0 Review of main findings

Introduction

This chapter will discuss the key findings of the research project focusing on the impact of new technology on news practice and production. The chapter explores two main aspects of newsroom practice. The first theme examines new technology and news production, while the second theme will discuss the understanding by journalists of their everyday work practice and involvement in news production in both automation and non-automation systems of newsroom.

The thesis sought to discover, explain and provide in-depth understanding of the following sets of objectives and research questions:

1. To explore the impact of new technology on the news production processes within the newsroom network.
2. To assess the interaction of journalists and nonhuman actors in the new automation systems in the newsroom.
3. To study the COP (community of the newsroom) in both automation and non-automation newsrooms.
4. To explain the influence of new technology on the managerial and institutional context.
5. To study the influences of digitization of the newsroom and to make comparisons between the KNN and GK channels.

9.0.1 New technology and news production

The key goal of this research project was to examine the effect of the new technology tools on the news production process, journalists' practice and newsroom culture in two Kurdish news channels. In terms of the impact of news technology across the modern newsroom, chapter 2 discussed the historical context of journalism, technology change and significant change

brought by new technological tools to the framework of news production process as well as journalists practice. Chapter 2 content discussed three main workplaces of news production process, provided in-depth information related to the key aspects of the technology's potential impact on main news crew and workspace of journalists. This chapter addressed the digitization of newsroom, computerization, knowledge management, news crews and workplaces. The examination of the two cases studies in chapters 7 and 8, provided description and explanation of the journalists practice in the modern newsroom network. The chapters compared news practice in the non-automation circumstance as compared to the digital automation context, in particularly, they provide an assessment of journalists understanding of their own practice, their relationships, training, learning process, visual skills and technology uses in everyday work.

9.0.2 Interaction with technology and community

The thesis looked to address the second and third research questions through the combination and application of the ANT and COP theories. Chapters 3, 4 and 5 present these theories and their approach to describing and analysing how journalists construct their relationship within human-to-human interaction, and through connection between human and nonhuman actors within the workplace network. The main elements addressed in relation to ANT include the journalists' involvement in the operation of editing, participation, negotiation, translation process, inscription in the workplace, stabilization of network and also, providing practical demonstration relating to each key words in the newsroom network. In the context of the COP approach chapters 3 and 5 discuss the key aspects of Wenger's (COP)(1998) notion and how it can be applied in the context of this research project. This chapter explored how this model might work in the community of the newsroom. The chapter by provided an explanation of the key aspects linked to journalists practice and social world of the workplace. These two chapters addressed the key concepts of COP in the newsroom, focusing on: community; domain; practice; meaning and identity.

9.0.3 Managing news production

In regard to the fourth research question, the influence of new technology on the managerial and institutional context, this aspect is discussed in detail in the Chapters 2, 7 and 8. These provide explanation of how technological tools have impacted the framework of news production and information management in the newsroom. In particular Chapter 2 addressed many key aspects of the technology change that has recently impacted on the framework of newsroom production. Also, Chapter 3 discussed the effect of technology on the process of *learning, relationships* between members, *sharing knowledge* and understanding of the workers for their *practice*. Further Chapter 4 provided in-depth information related to the device as *nonhuman actor* in the news production process.

9.2 Key finding from the cases studies

The final research question is designed to explain the influences of digitization of the newsroom by comparing KNN and GK channels and linking this to the other six questions. Chapters 7 and 8 provide an in-depth explanation of the situation of journalists practice in both news channels. The qualitative findings showed that the majority of the journalists working with digital tools argued that the new technology has supported and provided more opportunities as well as facilities to conduct their everyday news practice in the newsroom. Also, the findings demonstrated that the newsroom network that is based on the digital automation system (Avid technology in the case of KNN, see chapter 1) is more stable (ANT)(chapters, 4 and 8) than the non-automation system (chapter 7). In this way, the findings showed that the practitioners have ability to manage, control and make efficient connection between the workers within the organizational network. Further, the journalists' in the digital automated newsroom have greater ability to share projects (COP), more involvement in the learning process (COP), conduct more group discussion (COP/ANT) and manage their relationships (COP) better within the network. However, the newsroom network that is based on the non-automation system the case of GK channel, has

many challenging organisational issues in relation to news practice and activity. In the term of news practice, the journalists' have issues with understanding news tasks, especially, dealing with visual aspects of the news stories, shaping the form of news items and also contents as an editorial aspect of the news package. These aspects of the news practices create persistent organisational problems and lead to an unstable news network (ANT) (Chapter 4.8). Much of this instability derives from the fragmented technology systems, and lack of both technological and organisational integration. Along side this the non-automation system has limited management tools (technological and organisational) to support key actors within the network, especially the news producer. Another important finding illustrated that the problems related to the journalists situation in the newsroom network, includes lack participation of the journalists' in training and skills improvement, and a lack of knowledge in conducting the news practice. Such limitations restrict the ability of the newsroom to develop a strong COP.

9.1.1 The digital technology and news production process in the KNN newsroom

This section will discuss the role and impact of new technology on the news production process and framework of journalists' practice. The journalists in the digital newsroom claimed that new technology tools, such as Avid technology, provide many facilities that support their everyday work practice. For this reason, the journalists have greater opportunities to understand their tasks and news practice within their newsroom network. This aspect of newsroom digitization helps the workers to re-shape and reconfigure their relationships, news practice, improve their skills and construct their network within the newsroom environment (chapter, 2).

In terms of the ANT and COP approach to analysis the researcher found that the development of the skills of the practitioner are an essential aspect of their everyday practice. In particular the trained use of technology helps them to conduct their tasks efficiently. In this manner, the journalists in the KNN news network both argue and demonstrate through their practice that the new

automated system plays a key role in developing both their skills and their understanding of news practice. It particularly has a role in choosing suitable shots for news stories and collecting all the elements together in one package. The findings therefor indicate that the journalists in the KNN newsroom noted an improvement in their skills, understanding and knowledge in dealing with news technology and the news production process. This is despite the journalists in the KNN network requiring more multiple and varied skills and experience related to editing footage, information and writing to pictures as compared to their GK colleagues. They needed to be more multi-skilled than traditional journalists, however retained a clearer role identity (COP) in the newsroom.

The stable network supporting technology places a greater emphasis on production skills. This includes a broad set of multiple skills but especially places emphasis on visual skills. With regard to the visual skills of the journalists in the KNN news network, the qualitative findings showed that the news workers had experience and a reasonable level of skills in dealing with footage and shots of news stories. In this respect the news producer in the KNN network pointed to the key factors that challenge those without digital and multi-skilled experience (chapter 8). These include the lack of experience of the journalists in dealing with and knowing about the shot frame, size, function and movement in the context of news stories. The main problem, which journalists identified in television, is lack of practice and the needs for more experience in dealing with visual aspects of the news package. This aspect of news practices affects the stabilization of newsroom network more than others. However, the journalists in the KNN newsroom have developed a level of experience in dealing with visual graphics and using this element in their news creating process. The findings showed that the news practitioners still needed further experience and training in order to control this aspect of news practice, in particular the visual grammar aspect of news stories, news form and news content as editorial (chapter, 7).

Regarding the everyday routine and relationships between the journalists in the KNN newsroom network, the qualitative findings showed that the news

workers have good relations with each other, when engaging with their projects and interactions in the news production process. In this regard, the copy editor in the KNN newsroom recognised that the news crew are well established in the workplace and these aspects encourage the journalists to conduct more negotiations and discussions related to the news production process. This building of community and collaborative news practice brings greater stability to the network and the news producers are able to control the news operation more effectively. Alongside this the KNN newsroom system facilitates both technological and organisational activities that allow for the construction of relationships, connections and the shaping of interactions within the workplace (COP). In terms of the interaction of journalists with the newsroom system, the chief news reporter in the KNN newsroom demonstrated in his interviews that the news editors for example are able to use the automated system in an efficient way in their news practice. In the same way, the journalists illustrate how the automated system provides far more flexible facilities for them to conduct their news practice and manage their news operation process compared to non-automation context. With regard to the news operation process in the KNN news network, the journalists in their interviews demonstrated that through use of the system they have the ability to control a wide variety of news genres and packages. Overall this supported greater mutual engagement (COP) in the team.

The qualitative findings showed that the majority of the news practitioners in the KNN newsroom had an academic qualification and that they are involved in training courses related to their news practice and the digital newsroom system. However, newcomers to journalism claimed they needed more participation in the workshops and training courses in order to improve their style of news writing and work skills, particularly in the digital environment. In terms of experience and practical skills, these are essential requirements for journalists applying to work in the KNN channel newsroom. Moreover, the procedure of accepting newcomers to the newsroom network is based on both testing and the CV application form. The findings showed that this aspect

created more competition between journalists in order have their application accepted by the KNN channel.

In the context of comparing the qualitative findings from the two newsrooms, the researcher found that the automation system in newsrooms also plays a significant role in reducing the number of journalists, increasing the amount of news production, while the system provides practitioners with more engagement and interaction in news projects. The following main factors were identified from the findings. First, an increase in both the speed and the volume of news production were observed. Second, the study identified a reduction in the number of employees in the newsroom. Third, there was a flattening of the hierarchy and increase in interaction among newsroom workers. Fourth, there was a broadening and deepening of skills in workers: across the newsroom; leading to multi-skilling and merged roles; and finally, there was a greater focus on visual literacy and skills in digital automation as compared to non-automation news production in GK that remained more linear and text based. Therefore the flexibility of production and skills set leads to a greater culture of writing for images and thinking visually about the news.

The findings showed that journalists in the digital network newsroom had a greater commitment to the goals of the news producer (focal actor), stylebook of the network and they also followed the news practice more closely (translation process, ANT), as compared to those in the non-automation newsroom. In this aspect the news producer in the KNN newsroom demonstrated that the journalists followed the instructions produced by the daily conference and negotiation between news crewmembers. In this respect, the news producers have significant but well supported role in determining and shaping the final format of the news production in the KNN network newsroom. Overall this created much greater stability in the newsroom (ANT).

9.1.2The non-automation system and news production in the GK newsroom

The findings illustrated that the journalists in the GK newsroom practice mainly focused on the use of the non-automation systems and they also believed that working in this environment involves many obstacles. In this manner, the

researcher observed that the news practitioners in the GK newsroom have problems in dealing with news elements and some of them have limited experience in creating news packages. They particularly lacked an understanding of the visual aspect of the news stories, including, shot types, size and function. The participants in the qualitative interviews in the GK newsroom recognized that newcomers have limited skills and knowledge related to the news practice and news-making process. In this context, the news producer in the GK newsroom negatively pointed out that news workers lack talent and skills in relation to news practice. As writing and video editing are conducted in separate workspace and on separate devices.

In terms of news practice and the construction of news packages in the GK newsroom, the journalists have challenges in news writing style and lack of skills in editing information. Alongside this aspect, the news producer argued that the news reporters have difficulty with understanding all elements of news stories, including how to organize information, the editing process, footages and putting them all together in the same package. The findings showed that the GK newsroom suffers from many technical and organisational challenges that directly impact the newsroom practice and news production process. Furthermore, the news producer argued that the newsroom needs more professional skills in dealing with news items and especially writing to pictures. Writing to pictures being something that is difficult in the non-automation context.

The news producer in the GK newsroom as an example of focal actor (chapter,4) in the newsroom network, the researcher observed that the producer faced many challenges in particular, repeatedly solving the problems of the news reporter and editor. This problem solving is needed to makes the network more stable (chapter, 4) in order to produce news packages. This aspect of news practice is connecting with the lack of skills, experience in news practice, knowledge and understanding of the journalists and in the lack of integrated systems to support completing their tasks. Furthermore, the findings showed that the news crew in GK therefore face a great deal of both work stress and difficult tasks that make the network unstable. As a result the news producer in

the GK newsroom argued that they have many tasks assignments and responsibilities across the non-automation system in their everyday news practice.

The findings showed that the majority of journalists in the newsroom agreed that the GK newsroom system makes their practice more difficult and this impacts on the quantity of their news productivity. In the same way, the news anchor in the GK channel argued that they face many challenges, especially in 24/7 news making within the newsroom. In this regard, the researcher observed that the system of archiving and saving news materials creates problems for journalists in their everyday practice of trying to rapidly produce news content. This system is based on limited and time consuming traditional archiving and searching. Furthermore, the researcher observed that the non-automation system does not provide journalists with adequate tools to manage the rapid news operation and activity. As a result the limitations of the non-automation system requires greater numbers of journalists in order to be able to conduct the news practice without creating too much work stress.

In the terms of the in-depth interviews, the journalists referred to the relationships within the network, arguing that these needs remain sociable and companionable in order to conduct their practice within their newsroom community. Other qualitative findings showed that the news practitioners have positive relationships within their group work strategies and desk share in the newsroom. Though majority of the journalists in the GK newsroom rely on the news organisation's administration to create social events and monthly meetings for the workers. In the context of the COP model, this aspect provides the journalists with opportunities to interact with each other, and also, become involved in the process of learning. Having said this the findings showed that the news editor's tasks and news practice are based on the individual job and this places boundaries on their activities often not being involved or interacting with other newsroom members. In the same way, the news producer in the GK channel argued that they do not have effective relationships in the community. In this respect, the news editor negatively referred to the corporation news

work, teamwork and mutual engagement (COP) between the news practitioners in the GK channel.

One of the essential points that emerged in the GK newsroom is that the majority of the journalists agreed that the news workers need more training courses and workshop related to their news practice. With respect to involvement in the process of learning (COP), the findings showed that the journalists needed more participation in workshops related to their news practice and newsroom culture. In the same way, the news reporter in the GK channel argued that the correspondents required more training courses in order to improve their skills and knowledge surrounding news report production and the making news packages.

The qualitative findings revealed that the GK newsroom has a gap in the professional skills of its news workers such as news anchors and editors. Alongside this, the news producer of the GK newsroom argued that the news anchors have different level of skills in dealing with technology, for instance PC computers. The news anchor noted that the news presenters can only perform limited tasks, which including reading and asking the host of the studio questions. In the same way, the researcher observed that the news anchors need more practice and training to improve their work skills within the newsroom network. The news editor also argued that the editors have little knowledge and experience in recognising and arranging the shots logically in the news package.

Regarding to the negotiations and discussions between journalists in the GK newsroom, the findings showed that the journalists have limited space for discussion surrounding their news practice. In the same way, the news producer in the newsroom argued that there is no everyday conference to discuss news operation and activity in the workplace. Other related findings illustrated that the discussions related to the news operation are limited to those between the news producer and senior news producer, in particular surrounding some aspect of the news headlines, top stories and agenda. As a result, organisational structures are quite hierarchical and the technologies

used reflect this with both roles and technology tools falling into distinct silos. In this context, the researcher observed that the journalists have limited space in order to manage their exchange of information, experience and involvement in the workplace learning process.

The study discovered in the case of the GK non-automation newsroom that the news crew were more numerous than in the KNN channel. Also, news production was found to be very slow compared to KNN and not as fruitful and as dynamic as the modern newsroom. Technologies did not support the easy management of a heterogeneous network of technology tools and human actors (chapter,4). Though roles were more hierarchically defined the workers consequently had fewer and less varied news reporting and technical skills to deal with news story elements and the news production process. In this context the journalists did not have any flexibility to work more efficiently and to create more contemporary forms of news packages. The resulting stress and lack of communal learning (COP) and collaboration across roles makes the network inherently unstable (ANT) and required extensive work by news producer as a key focal actor (ANT) to maintain the network stability and the organisational community.

9.3 Reflections on theoretical implications: ANT and COP models

The use of ANT and COP models in the context of the present research provide the researcher an essential tool in order to illustrate and analyse the framework of the journalism practice everyday life within network newsrooms. Also, the combination of the approaches provides the researcher with a tool to interpret the newsroom network activity and to provide an explanatory framework surrounding the journalists' actions in dealing with technology. This combines several key concepts from the ANT and COP approaches, in particular; use of new technology systems or news devices in the newsroom network; everyday practice; learning processes; building relationships between journalists; interaction between actors, shared projects between network members, the translation process; devising instructions for the focal actor (ANT). Further, the

ANT offers the researcher explanations and understanding of the new technology, how it shapes and forms the network, makes connections between actors, develops relationships and shapes the journalists practice. The case of the digital automation system in the KNN newsroom, this leads to a far more stable network and community.

The digital automated system is an essential element of the KNN newsroom. It plays a key role in providing journalists with opportunities to conduct news practice efficient and supports activity within the news production network, specifically with regarded to the decision-making, innovation process, piloting news project, news editorial management and also the technical aspect of the news operation. Journalists are able to work with news members in a more interactive and efficient way. The related community structures allow them to obtain in-depth understanding of their actions and allow them to engage in the learning process and the exchange of information and experience.

It could be argued that understanding newsroom practice as COP and ANT point out the essential technical elements in the workplace network and community. The digital automated system in part determines the form of practice and activity in the network. The combination of flexibility and community engagement in particular, increases the journalists' commitment to the key goals of network and the focal actors. For instance, the news producer creates the key goal of the network and the technology supports rather than hinders how other journalists can follow the instructions of their focal actor in order to reach their goal. In this way, the follower helps the news producer to make the network more stable in order to produce a news package. Understanding the newsroom community as COP provides the researcher with a focus on journalists' practices, learning process, shared projects and the identity of news workers. For example, it focuses on the everyday interactions of the journalists in the workplace network, mutual engagement, joint projects, shared experiences, and the workers involvement in new circumstance of news practice. Here again the flexibility and interactivity of the digital systems helps the journalists' to conduct their practice and privies support to learning and sharing of knowledge within the community network.

The second element is the journalists' practice and everyday life. The ANT approach looks at the actors, how they conduct their activity that based on the network action program, what do they do? And how is the work inscribed and how do they construct the translation process with other actors in the network, in order to make the network more stable. This aspect related to the convergence of many elements within the automated system of newsroom that allows the journalists' more flexibility to conduct their practice, particular with mutual engagement between the journalists that involved in the news operation. By contrast, the journalists' everyday practice in the non-automation newsroom is less flexible in conducting mutual engagement and joint enterprise in the operation of news production and sharing their practice with the non-automation system. This aspect of the system and devices makes an unstable network for producing news items, in particular, there is a lot of work stress on the news crew to organize their connection and shape the news stories.

The third component is the learning process related to the COP approach. This has a great influence on the process of news production and shaping the newsroom community, particularly when the network members are involved in workplace learning, joint enterprise and mutual engagement. This feature significantly supports the journalists to share their information, experience and knowledge with other members of news team. Furthermore, the learning process in the newsroom has another implication on the newsroom network and journalists practice, specifically; the members have learnt several uses and deal with many actors that are involved in the news production process. This aspect provides journalists with more opportunities to establish and shape their newsroom network stabilization.

The qualitative findings highlight that the automated system in the KNN channel provides more opportunities for the journalists to build their relationships within the network and this aspect supports the members' interaction in their everyday life. However, in the GK newsroom it was demonstrated that the non-automation system did not encourage the journalists to construct their relationship and conduct their practice in collaboration with a broad group within the newsroom, which would lead to more interaction within their

workplace. This implies that the technology in the GK newsroom has impacted the news workers interaction and productivity as well as the mutual engagement and joint enterprise of the news workers in the process of learning. Hence, the use of non-networked and non-automation tools does not help and may hinder, journalists in conducting their practice, interactions, shared projects nor does it help build their relationships in an efficient way. In this context, ANT and COP methods in this setting contribute to identifying many issues related to the convergence of the technological tools in the newsroom, specifically in digital and non-automation systems.

In this way, the technology tools in the GK newsroom do not match the requirement of contemporary news practice and the tasks of journalists. Another problem of the non-automation system is that the journalists have less ability to manage their news production and deal with elements that involved in constructing the news package. Thus, the devices in the newsroom play a great role in the process of news production and news practices within the network. Wenger (COP)(2011) supports the notion that technology tools are essential in conducting practice, involving workers in learning, use as discussion board and providing the members with an opportunity to connect with others.

In terms of sharing projects within the COP concept, the digital automation system in the KNN network supports the journalists in joint engagement, particularly, the editing of a single news package by more than one news editor or news producer. Also, this system provides facilities to the news crew to connect together, send messages, feedback, online discussion and the ability to edit the news package. Further, the ANT approach helps to map the connections between human and non-human actors within the network. In the GK newsroom, there is no automated workplace, therefore this impacts negatively on the news practice and leads to news production being less interactive, fewer connections and feedback between the newsroom members and less interaction between the journalists in when creating a news package with other news crew members.

The two final elements relate to the translation process and inscription within the ANT approach. These concepts help the researcher to understand the key aspect of news production network, especially the human and nonhuman actors. In the context of the translation process, the news producer as an example of the focal actor in the network imposes his or her direction on other actors (journalists) to follow the instructions and the key goals of the network. In the next step of the network, which is inscription, the journalists act and shape their attitudes in order to follow the focal actor as an example of newsroom network. Through the news producer's instructions followers attempt to conduct their practice to achieve the key goal of the newsroom network. In this way, through this combination between the ANT and COP approaches identifies many key issues in the newsroom network and community of journalists.

9.4 Skills and training of journalists from COP and ANT perspective

The combination of the COP and ANT models will provide essential tools to the researcher that help identify many aspects of everyday journalists' practices, specifically regarding the work skills, learning and training within the newsroom. The application of the ANT and COP models in the context of the newsroom network is a vital approach to analysis of the media work and news practices. In this manner, the COP has supported and complemented ANT in providing an illustration of the learning, knowledge gain and exchange of experience within the workplace network. In the scope of media practice, the involvement in learning, education and training is the main component to help the journalists to drive their news processes and find out new ways to gain knowledge, information and exchange experiences in their tasks.

The COP model is a useful tool to provide better understanding surrounding the situation of learning, exchange experiences and engagement of the journalists in news activities. This concept helps the researcher to discover more about the newsroom community, specifically the way of building the journalists' relationships, mutual engagement, sharing information, knowledge and

improvement of the skills news practice as well as dealing with news resources. Furthermore, this model provides the ability to gather more information surrounding the development of the news practices, workplace learning and recognise the issues regarding the journalists' training and their requirements to improve work skills. This concept contributed more effectively in determining the structure of the news crew: co-working and the way to improve their skills. Moreover, by the use of the COP approach, the researcher obtains opportunities to understand the journalists' discussion and negotiation regarding news practices, exchange experiences, shaping items and solving their problems.

The ANT provides the researcher with a method to obtain in-depth understanding surrounding the social and technical aspects of the newsroom practices. This model helps the researcher to illustrate the technology's integration in the newsroom network, specifically the automation system in development of news practice engagement in the KNN Channel. Also, ANT use helps the researcher to obtain a better understanding of the structure of the newsroom network including the everyday life of journalists, rules, role of actors, key goals, automation system and routines. ANT allows the researcher to understand the roles of news producers as an example of a focal actor or gatekeeper in the newsroom network. Also, how the focal actor provides instruction to other actors in their everyday practices in order to reach the key goal of the network. ANT offers the researcher understanding of the network design, collaborative learning amongst actors, mapping the technology and human interests, as well as the relationships between human and nonhuman actors. The ANT helps to recognise the actors' negotiation as part of the learning process of the human actors to follow the key goal within the heterogeneous network and solve their problems. The ANT model offers a series of vital concepts that directly help the process of creation and learning new information in the context of the newsroom network (see chapter 4).

9.5 Reflections on the practical implications of the findings for journalists

According to the qualitative findings of the present research project, the new technology and automation have a significant role in mapping, managing, shaping practice, controlling news operation and constructing the newsroom networks. This change in the framework of newsroom networks in Iraqi-Kurdistan has led to a significant improvement in the skills of journalists, as well as the knowledge management and quality of news production. This has identified by the journalists and news workers in the KNN newsroom network. Also, they claimed that the use of the new automation system in the newsroom network had encouraged journalists to obtain in-depth understanding surrounding their news practice and news production process. Use of the technology makes the newsroom network more stable and able to support news practice for the journalists and the news overall operation.

Alongside this, the GK newsroom that is still based on the non-automation system, has difficulty in news production management and the journalists face many challenges to conducting their practice. This makes the network unstable, especially in mapping of relationships between the human and nonhuman in the process of news production. In this context, the journalists in the GK newsroom argued that the newsroom system makes news practice more challenging and difficult, especially in the process of news packaging, news management, mapping and shaping their relationships. By contrast, the majority of the journalists in the digitized newsroom widely accepted the notion that the automation system plays a great role in many aspects, including, the management of news operation, creation news packages and linkage between the members of the network.

The other key findings of the present project are that the problems facing journalists in their framework are practical work skills in the news industry. This is reflected in many tasks in both channels, including, the skills of writing, editing pictures, dealing with technology, information management and missing some newsroom activities such as morning conferences in the GK newsroom. Moreover, the journalists stated that they require more involvement in learning

process in the workplace such as workshop training, in particular, related to the newsroom culture and news practices. Consequently, the future development of newsroom automation systems appeared to require considerable effort in the operation of news production and improvement of the journalists' skills. The key problem that faces the administration in the Kurdish news channels is the cost of implementation of the automation system and updates the software in the newsroom. This aspect requires the channels to expend more cost and effort to implement the new system. As a result there is a significant need for journalists to have more training and experience in the use of the system in an appropriate way.

According to the findings the news channels have issues regarding to the professional skills and expertise of journalists within the newsroom practice. This has affected the news productivity, including the quality and quantity of news. In this manner, the journalists in the GK newsroom stated negatively the situation of news production and their ability to produce good quality of news stories. Furthermore, the non-automation system in the GK newsroom is very slow compared to the digital system in KNN newsroom and may be too limited for contemporary news cycles. This aspect encourages the news practitioners in the KNN to work more quickly than those on the GK channel. In order to solve this problem, the newsroom may end up being required with a replace the non-automation system to digital system.

The journalists in both channels stated that they needed more encouragement to involve them in sharing projects, creating group work, group discussions and arranging everyday meetings in order to involve them in the negotiation of their practice. This aspect of the newsroom activity provides the news workers with more opportunities to find their identity in their news practice. Furthermore, the journalists need more practical training including improved editing skills, dealing with visual aspects of news stories and obtaining more experience related to the footage as well as shots function in the news items.

9.6 The contribution of this thesis to COP and ANT models

This section discusses the key contribution of the thesis in using a combination of COP and ANT to examine journalists practice in the newsroom. The ANT model provides a fundamental method to interpret the journalists' practices within the newsroom network, for example, the news producer role as an example of a focal actor in providing the news workers with instruction to reach their everyday goals. The ANT approach allows recognising the human and nonhuman actors within the network, specifically in mapping, mutual shaping, translating and converting. Another benefit of the use of ANT is that it enables the researcher to engage with the ontological aspects of the issues in the field of media study. Furthermore, the ANT model offers important tools and methodologies for the ethnographer to analyse the situation of journalists' news practices and news production workflow within the newsroom, specifically dealing with the human and nonhuman actors. ANT provides the researcher with powerful tools to understand the dynamic processes of news practices and production workflow, specifically, in two different settings of the workplace (automation and non-automation systems) and different principles of news practices as well as two different newsroom cultures.

Regarding the key benefits of uses of the COP model within this research project, it provides essential tools to explain the structure of the newsroom community, specifically, demonstrating the journalists' practice, professional identity, learning process, mutual engagement, relationships and negotiation regarding the news practices. Furthermore, this model offers the researcher opportunity to understand the process of workplace learning, exchange knowledge and experience between the members of the newsroom community. The COP contributed to discovery of more about collaborative work, joint enterprise and shared interest between the members of the newsroom community.

The application of both COP and ANT approaches within this research project contributed to discovery of many aspects regarding technical and journalists' practice in the newsroom network. Furthermore, the COP is complementary for

the ANT in dealing with the technological tools and journalists' practices within the newsroom community.

Turning to the limitation of both the ANT and COP the key limitation of the ANT model in application in the field of media is the understanding of the journalists' actions and practices (Couldry, 2008). He argued that 'there are important reasons why ANT cannot offer a total theory of media, these are its insufficient attention to questions of time, power and interpretation' (Couldry, 2008, p.106). Another limitation of ANT is that this approach contributes less to the political perspective.

The key limitation of the COP model in the newsroom practices is application of the conceptualised frame for the COP in the workplace. Another is the time needed to form practices to provide the members with an opportunity to engage in activities. In regards to the limitation of COP in connecting to the practices in the workplace, there are many reasons for these aspects, for instance lack of teamwork, group work, interactions between journalists and competences amongst them, which include confidence and trust of practitioners. Furthermore, the lack of identification in the COP, which leads to the journalists having an unclear viewpoint and interest in their news activity as well as their everyday practices in the newsroom community.

9.7 The practical use of thesis

The practical outcome of this research project is has been to concentrate on the general engagement of the journalists' and news workers in training course. This aspect helps the journalists to improve their work skills and in managing the news production process. At the time of data collection, and in response to participant requests, the researcher constructed two training workshop for GK and KNN news correspondents. The workshop provided information for the news reporters on producing the visual aspect of news stories and managing fieldwork. The researcher observed that the journalists in both newsroom networks have problems related to the news practice, especially in the creation of news stories and treatment of the news topic as a package. In this context,

this thesis has already helped to guide the journalists' at both KNN and GK to improve their skills and understand their problems within the newsroom network.

Reflexively as the thesis content discussed many key aspects of the journalists' practice in the newsroom the thesis could function as a resource to help in the reconfiguration of newsroom network culture, re-shape the workplace goals and redesign the news production network. Also, the project is useful for both channels to have strategic projects to tackle the issues related to the news practitioners and their professional skills in producing news items.

9.8 The contribution of the thesis to wider field of the study of journalism and technology

This section will present the four key contributions and useful aspects of this thesis in the wider field.

1. Application of ANT and COP models.

The first key contribution of this research project is the application of the ANT and COP. These two applications provide the researcher with opportunities to conduct analysis for the newsroom network structure and the form of everyday journalists' practices. Furthermore, the applications offer the researcher more detailed knowledge and understanding in interpreting and identifying the key component of the news production workflow, for example the role of the news producer as an example of a focal actor or gatekeeper in contributing to the process of news procedures in the newsroom network. Also, the ANT is helpful to provide tools to establish the variety of relationships between actors, and the positions and roles of the actors within the newsroom network (see chapter 4). The COP model contributes to illustrating the situation of the learning process, joint enterprise, sharing process, mutual engagement between journalists, interaction between the news workers and how the journalists are able to gain information and exchange their experiences in relation to their news practices in the newsroom community.

2. The combination between ANT and COP models.

The combination between these two models within the context of newsroom practices is a key contribution that helps to reveal many aspects of the news production workflow. These combinations identify how the journalists negotiate to reach the key goal of their practices. The COP model helps to demonstrate the process of learning and the journalists' everyday life of news practices in the newsroom. Also, this offers the researcher essential tools to demonstrate and analyse the mapping and structure of the news practices network within the newsroom.

3. Comparing of automation and non-automation newsroom systems.

This combination of COP and ANT approaches helps to comparing the two different settings circumstances, workplaces and systems, between the automation and non-automation systems in the newsroom.

4. Description of news television production in Iraqi-Kurdistan.

One of the most important contributions of this research project is the use of ANT and COP models in media studies in Iraqi-Kurdistan, specifically within the television newsroom practices. This project is the first study in Iraqi-Kurdistan to address the comparison between automation and non-automation systems in the Kurdish news channels. The present research project has addressed many aspects relating to the issues of Kurdish journalists in the newsroom, including the news practices, training, skills, relationships and understanding their everyday practices.

9.9 The contribution of the thesis to journalists in Iraqi-Kurdistan

The present thesis addresses several aspects of the automation and non-automation systems in the television newsroom. This project introduces many key concepts regarding the technological changes and newsroom culture. The triangulation amongst newsroom practices, COP and ANT will offer the practitioners more practical knowledge regarding the circumstance of news production workflow. Furthermore, the researcher presents some literature related to the newsroom practices and news production. These themes will

provide the journalists in Iraqi-Kurdistan with more ideas, experiences and ideas to help carry out their everyday practice more efficiently.

Through the COP concept, the researcher attempts to introduce and identify how the journalists conduct their news practice as well as manages their everyday life in the workplace. For example, the joint enterprise, shared repertoire and mutual engagement between the newsroom members, are three key concepts that are explained within the thesis. The researcher presented useful ideas by providing a practical example from their everyday life of the newsroom community. It could be useful to guide the journalists in a professional way in regard to their news practices and news work. Furthermore, the thesis provides an in-depth explanation surrounding the learning process and the way of gaining knowledge and information regarding news practices within the newsroom.

The research project offers the news practitioners knowledge relating to ways of forming their discussions, decision-making and negotiations regarding news practices. This aspect helps the journalists to improve their skills of group discussion and thinking about this matter in a professional way to reach the key goal of the newsroom. Also, the project offers journalists in Iraqi-Kurdistan more interpretation surrounding the technological equipment, which helps the workers to improve their relationships, communicate, exchange information, learn more , organise their tasks and share their projects. This project gives the journalists more opportunities to obtain better understanding in creating the collaboration work and co-work within the newsroom. Hence, the thesis guides the journalists to generate and obtain new knowledge and experience as well as gaining new information regarding the newsroom practice and culture.

In the context of this thesis, ANT model offers the journalists an essential explanation relating to social and technical aspects of the newsroom network. This approach provides the workers with the means to understand the shape of their relationships between human and nonhuman actors within the network. Also, ANT offers the practitioners in-depth information regarding the mapping of actors and relationships, forming their practice and the way of following the

key goal of the network. Also, this model provides the news workers with more demonstrations relating to the shape of news practices, their communication and their responsibility in the news activities. The application of the ANT model helps the journalists to obtain understanding surrounding the role of different types of actors (human and nonhuman) within heterogeneous network that is involved in the process of news production. Also, this thesis helps the news workers to know more about the relations amongst practitioners and things that shape the news items. ANT provides important methods to reading media practices and the news production process. This aspect of the ANT helps the journalists to know how they make their dynamic network of news more stabilised.

9.10 Recommendation for future studies

The present research project concentrated on determines the form of newsroom community network that is based on the use of both automation and non-automation systems. This study has focused on examining the impact of new technology on the news production and journalists' practice within the newsroom. Also, the key aspect of this study is focused on the combination of ANT and COP. Recent technology changes in the newsroom network have played a great role in shaping, designing, and reconfiguring newsroom practice and news production networks. In this way, the researcher will suggest further study and research surrounding news practice, newsroom culture and news production networks.

There is a major issue in the area of newsroom networks that faces the journalists' practice, namely the use of new technology and multi-media skills. In the context of this project, the researcher realized that there is limited work surrounding the combination between ANT and COP in the field of communication and media. For example it is essential to conduct research related to the virtual community of correspondents in the field and how correspondents act in this network. Furthermore, it is essential to conduct research related to what journalists understand in relation to dealing with footage and the skills of journalists within news practice in the digital age.

Moreover, it is important to address both newsroom policy and new technology. Currently, there is a large amount of information surrounding the identity of journalists and the understanding of news practice in the newsroom. In addition, the newsroom field needs further study related to how journalists construct their news projects with other newsroom network members.

9.11 Conclusions

The first key findings showed that the automation system software helps the development of the journalists' skills, experiences of work and knowledge in the newsroom network. Also, this aspect of the newsroom network makes the process of news production more stable and journalists have ability to conduct their practice in efficient way. Further, the automation system provides the journalists more opportunities to deal with their production in flexible way, in particularly the connection between journalists within the network, provides feedback about their production and shaping the news items within share project. However, in the case of GK newsroom non-automation system does not help the journalists in their everyday news practice and hinders how they manage their news practices.

The second qualitative finding showed that the ANT and COP work together in analysis the situation of news practice in the newsroom network, especially in understating and discuss the connection between the human and nonhuman actor in the heterogeneous network. The findings showed discuss how the devices support the learning process and provide the workers way to exchange information and more involvement in the process. In this context both of the ANT and COP approaches have huge significance the in analysis the news production process within the newsroom network. Hence, the project would argue that ANT and COP are essential and effective ways to interpreted the newsroom practice and network program action.

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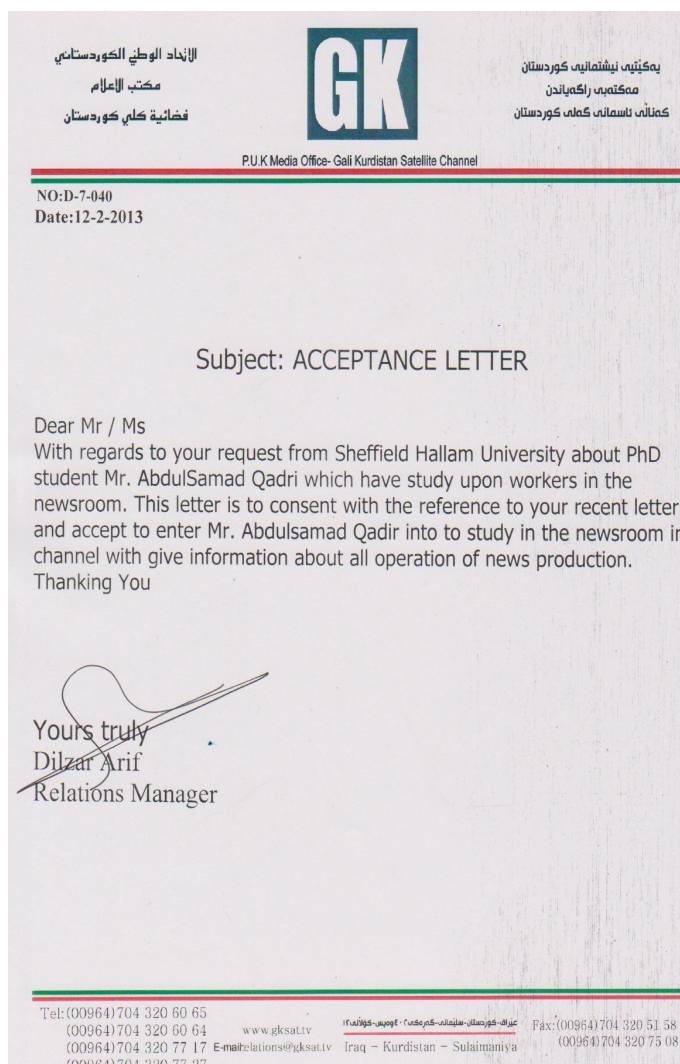
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Appendix

Appendix (1) confirmation letter from KNN channel



Appendix (2) confirmation letter from GK channel



Appendix (3), some example of the Observation and field notes

Notes:

- GK's newsroom practice is based on a non-automation system, not fully digitised workplace networking.
- The circumstance of the newsroom is not well organised - there are some table PC computers, for instance the journalists use Microsoft Word for editing, typing news stories and website searches. They have internet access.
- The room, the newsroom space, includes a table for the news director and seven computers for the news crew, one computer for the news producer, one for the news editor, one for the news typist and three other desk computers for Krmanji news, sport and economic programmes.
- The room is not too big and there is enough space for the news practices; there is no table for news crews to discuss the news stories and news plan or specific room for discussion.
- The newsroom area has a shared window with studio news; when the news anchor presents the news programme the background is the newsroom area.
- The workplace newsroom, then studio news and the news control room, the three of them follow each other.
- Another table in the newsroom is for the news anchor to sit at when they are waiting to read the news programme on the editor's computer or the producer's.
- In the newsroom there are TV screens on the wall, one for GK and another for Associated Press (AP) footage (but the AP screen is usually not on) and they have got Anadolu Agency through access to the Internet.
- There is a board on the wall for everyday practice notes - usually the news producer writes on it or the news director, but I observed that there is no daily update; they rarely put something new on the board for the news crew to note.

- On the morning shift three to four journalists work in the newsroom, one typist for typing the news stories, the news editor and one news producer, but after noon this number changes to seven journalists to work on all news programmes.
- Journalists' problems: the journalists have a range of problems and issues related to their news practices.
- News coverage problem: the journalists and newsroom don't have a very clear plan and don't organise everything to cover events very well.
- The GK newsroom doesn't have any daily, weekly, monthly or annual meetings to make an agenda for news coverage, in the long or short-term plan.
- Journalists have problems in dealing with some components of the news packages, for example, the key problem is they are unable to organise the information with the footage and video material of the news.
- Problem with the way of understanding how journalists shape the form and content of the packages.
- The journalists have particular problems, especially in dealing with visuals and content of how they form the news packages. In the GK newsroom they don't have any graphics to add to the news, the key reason for this is being unable to find professional people.
- The journalists and news workers have limited understanding surrounding their news tasks, editing, editorials and production.
- The journalists do not know enough about the video footage of news stories.
- The gaps in the automation system in GK Channel make the news practice difficult especially when spending a lot of time and effort to produce news packages -
- The majority of journalists have limited abilities and skills in doing news practice through non-automation .
- The majority of the journalists believe that this system (the non-automation system) does not help them to work in a good way.

- The problem in the field of newsgathering: the journalists face many problems when practising their tasks, for instance, a lack of skills in dealing with changeable situations.
- The journalists go into the news field without any clear plan, guidance on what they do there and make the news agenda. Sometimes they have technical problems with the SNG track or camera problem, or the video tape machine, sometimes the news crew in the field have problems in connection with the station.
- The journalists, after gathering information from the field back to the station, write up the news stories - this process takes too long and sometimes this makes a negative influence on the news production in the newsroom.
- The news reporter doesn't have any meetings about the daily practice, they just know their daily duty by putting the title of an event on the reporter board in their room.
- The news reporter doesn't have a clear plan to cover the news, no storyboard, no shooting plan.
- The news reporter team includes two people, the news reporter and cameraman, with driver.
- The news reporter participates in live coverage for events, sometimes, not all of the news reporters, but some of them.
- The journalists in GK face barriers in shaping the news packages in the field of events, related to the news reporter, understanding, practice and experiences in the field of television work and the newsroom.
- The news reporter does not participate in workshops to improve their news practice skills especially in creating, directing and making visual aspects of the news reporter more interactive.
- The reason for the journalists' situation is a lack of understanding to practice, this aspect is more connected with the careers system in GK, when the GK administration accepts journalists to work.
- Sometimes journalists do not have basic knowledge about the news practice and newsroom culture, then this aspect makes a problem for other news crew,

especially to help them and spend time with them so she/he understands the situation of news practice in the station.

- Some of the news editors in GK Channel have a lack of skills in dealing with the process of news editing.
- Editorial aspect of the news story: they cannot even apply a simple style of writing and matching news information with footage in the news item.
- No stylebook in the newsroom, such as use of common words and phrases in the context of their news editing.
- All the journalists sometimes have problems processing the new knowledge and information within their news item, some of them have a lack of organisation and lack of skills in dealing with data.
- The journalists in the newsroom lack skills in organising the footage with the news story information, linked to their experiences of journalists' practice. Some of them do not have experience of working in television, they have newspaper or radio backgrounds.
- The journalists' responsibilities in dealing with news information, news footage, soundbites and voiceovers, but in GK, the journalists have problems in dealing with the main components that make news a more interactive news story.
- In GK, the non-automation system has caused many issues and problems for the journalists and news workers, for example multiskills, multimedia and multitasks.
- In the non-automation system situation the journalists have limited skills of work news practice and management of the production workflow, its big barriers facing the news production workflow.
- In the footage room and the task of the footage editor in GK Channel, they have two separate rooms, one of them includes a sound recording studio, including three Apple Macs and including five Apple Mac computers, usually the news reporter is there for checking their report editing, the room of the footage editor, located in a different news editor's room.
- Software such as Final Cut Pro and Adobe Premiere.

- The footage editors only deal with the news stories' video footage and organise the visual elements.
- Sometimes the footage editor works on the graphics, still pictures and maps.
- The footage editor doesn't deal with the information and editorial aspects of the news content, this means doing the job of editing without thinking about information.
- They don't use shot scripts and lists before they do their news editing in the editing room.
- I did not see any storyboards there relating to the news reports that they do editing for.
- I observed that their work is not organised very well, they don't have any pre-planning or after-planning to edit the news reports.
- The news reporter comes back from fieldwork, holding their video tape and gives it to the news editor as footage.
- I did not see that the news reporter or news footage editor have a shot list and they rarely deal with the time code of the video material.
- I observed the news reporter go to the archive library to bring some videotape material to the room and the news editor told the news reporter to recreate the piece to camera for the report.
- The news reporter asked the news producer to check the first version of the report and the final version of the news report to get feedback and instructions if he wanted to change something, before going to broadcast. Sometimes I observed the work collaboration between news crews.
- The journalists in the GK newsroom have less interest in adding infographics to the news story. This aspect is more related to their views and experiences in dealing with news packages and how they want to make them more interactive for the audience, also, they don't have more graphic designers in the station, just their work focus on some news programme graphics activity.
- The journalists have a lack of experience in dealing with news editorials and the content of news stories.
- Discussion about improving the skills of the journalists with the news producer in GK Channel: the news producer told the news editor newcomer:

ask questions if you don't have experience in dealing with news stories and ask for help from your colleagues in the newsroom.

- The footage editor has a specific task, which is dealing with the image without thinking about matching footage with the information. I sat beside the footage editor in their room, to observe the operation, and how they deal with the news item. Some of the news reporters visited the room and discussed their work with the news editor and from time to time the news producer comes to this room and gives instructions to the other news editor to edit the news report and when they will be able to finish their editing for the news programme.
- The news reporter has a lack of skills in regard to news report production, shaping news reports and their news practice. In the news reporter's room, I discussed a lot about their news practices with the news reporter, they observed the schedule of the work in the room, and listened to the discussion of the chief of the news reporters. I observed one news reporter there in the room during a day, for an urgent situation and news, in the news reporter's room there was one TV screen and sometimes the news reporter used their TV to check their news item by linking it to the tape player. Before going to the news editor's room, I also observed the news reporter when they came back from work to their room to write the narrative and voiceover of the news reporter, then they went to the sound studio to record it.
- I observed their issues related to the news practice and news production and their problem with the news report in the editing room, especially when the report feed comes from outside of GK central.
- The news reporter has a lack of experience in dealing with the shape of news items, organising footage, skills of knowing about shots and matching footage with information.
- I sat beside the news reporter's and news editor's footage in the newsroom, listened to what they were saying in their discussion and watching what they were doing. In dealing with the news package in the editing room, the key problem for the news reporter is less knowledge related to the shots and type of shots, they don't know the name of the shots and function of the shots in their news packages.

- The newcomers as news workers in the GK network have different levels of understanding in dealing with news practices, knowledge of work and the newsroom culture. For instance the journalists have limited knowledge related to the news work and newsroom practice. The researcher observed the action of the journalists in the newsroom and close to their workplace environment.
- I observed that the newcomers, especially the news anchors, news editor and news reporter, that come to the GK newsroom have a lack of understanding and knowledge surrounding their new environments.
- With regards to the news producer in the GK newsroom, I observed the producer has a high position within the newsroom and has a great deal of authority to manage the news production. For example I observed the role of the news producer is to guide the fieldwork of news production and give instructions to the news editors and news editor footage. Also, I observed the discussion of the news producer with the news director about adding news to the news script.
- I observed that with the lack of professionalism of news workers and the news producer in GK Channel, this aspect creates barriers such as work stress on other expert practitioners in the field and a few of the news producers in the newsroom.
- News editor and writing news stories: I observed an example of news item writing of news editor the newcomer it was not in good quality and need more editing and improving especially the writing style, they need more practice and improvements to fix the way they write their news, especially for writing for television and writing to pictures in television, the news editor usually writes the news story without seeing the pictures for the story.
- The non-automation system makes a lot of difficulty for the news workers and puts stress on their tasks, this work stress is related to GK's newsroom non-automation system. I observed that how they do their news practice is difficult and there is more stress within the non-automation system, everything is in a different place, editing, archive and newsroom.
- I observed that in GK, they have a lack of professional news workers, for example the news anchor, news editor and news producer.

- The GK newsroom is an unstable network and faces many challenges/barriers:
 1. use of a non-automation system
 2. lack of news workers' skills
 3. lack of professional news workers
 4. no running of workshops and training courses
- I observed there are many challenges in the GK news network production. For instance, they have problems in the news event field with SNG and live events by Satellite News Gathering (SNG).
- They have problems with the editing videotape tools within the non-automation system. The non-automation system does not provide them with more tools to conduct their practice, the journalists don't have computers that are used for editing pictures and information together in the same place without moving a lot to a different place.
- The journalists conduct their practice within a non-automation system; this aspect causes problems when conducting research for information and updating news stories (visually and content). The non-automation system does not allow the journalists to conduct many activities with news practice, especially organising the content and the form of news stories.
- I observed the news reporters have problems, when they feed the footage to a central newsroom.
- In some cities news reporters have a double job – reporting events and as cameramen.
- I observed the news reporter when they do a double-job task, which makes the work of a news reporter stressful when organising all news elements within one package in an appropriate way.
- The news producer faces problems when trying to solve this in the newsroom. For example, with any problem in the news item the news producer spends a lot of time fixing, for example rewriting text, or re-recording the voiceover, or fixing footage, or a problem with the camera piece. I observed that some of the news reporters have problems with this aspect of the news report.

- I observed this aspect has a connection with other aspects of the newsroom in GK, for instance, the key reason for this situation and its failure is the non-automation system in GK, which does not provide the journalists with the necessary opportunities to understand their task and shape the production.
- Also, I observed that this problem in the news gathering fieldwork and the journalists have limited ability to do these tasks within the non-automation system, for example no access to the newsroom network.
- In the GK newsroom the news producer as the key gatekeeper or focal actor is involved in other tasks and news practices. They help the news editor and news crew to manage their tasks, for instance, the news writer works on the news editing and the news producer checks the items, adds information and monitors story footage. I observed that the news producer is involved in all the news operations, and thus copes with too much work stress.
- I observed this situation above, when the news producer carries out their task, as usual there is discussion with the news editor, the news producer provides the news editor with the way to fix the news story and the news producer adds information for the news story.
- This circumstance of the news producer's tasks in the network generates more work and too much stress on the news staff manager, as well as on the news producer. Also, this means they are unable to make decisions about a variety of actions and work in the network's programme of activities.
- I observed the number of news anchors in the workplace is less than the number that is required for coverage of the news services. GK Channel has news operations 24/7; this production needs more staff and news crew. I observed discussion between the news producer and news director to employ new news workers for the newsroom.
- The news production in the GK newsroom has problems and the news crew are unable to cover this amount of production. I noticed that the channel has another difficulty facing the journalists, specifically with the use of a non-automation archive system and the process of saving the news material that is fed in by the news agency. Also, the automated news storage system is not available in the GK newsroom network, enabling them access at any time and in any place.

- I observed that the non-automation system does not support management of the news practices, especially to create an efficient system of news storage and this process is very complicated and stressful for the workers in this scope.

Appendix (4) some example of the Semi-Structured Interviews with

News producer in GK Channel

How have you learnt to work in the newsroom? Do you have any workshops to help you to work in the newsroom?

The news producers learnt, their practices in the field of news production, by themselves through hard work and struggle to realise their practices. This is the biggest barrier that news practitioners in our channels are facing. The journalists that come to work here have not gained their knowledge and experience by the study at university or media college. They do not have enough skills, understanding and knowledge to practise their daily news routine in the newsroom. Thus, in the GK newsroom, we have a limited number of talented workers and limited human resources

In particular the news department is the heart of the news channel, because GK Channel firstly is a news channel, so should the administration pay more attention to the news department and provide more resources for this channel. Also related to the numbers of the news editor in the department, we have a reasonable number but some of the news editors' production has a lower quality at the same time he/she finished university and media department. However, they did not train and practise the news editor tasks there in a good way, this aspect of the news editor makes problems for us, if we compare with other news editors that have experience and skills, some of the news editors learnt to edit news here in the channel. Also, some of the news editors haven't finished any university and they can produce good quality news items and stories.

Do all the news workers understand their tasks?

The journalists in the GK newsroom have different levels of skills related to news writing and understanding their news practices.

Tell me about newsroom community members

Our department is just not limited for the news editor. It includes other news crew, for example, we have here a CG computer graphic person, the workers'

tasks in the department are more focused on writing up the news story title, subtitle, news script, by using Microsoft's PowerPoint programme. Also, other workers in the newsroom work to organise the wall screen footage and pictures, sometimes the news editor organises the wall screen footage if the worker is not available here. In general the news editor is aware of which pictures and footage will be put on the wall screen technology.

Tell me about the management of the wall screen and who manages this screen in the newsroom and how?

The selecting of video footage or images for the screen is constructed on the timetable of the news programme. For example for the long distance events, we use video footage related to the news stories and in the short news, we just use pictures to refer to the news events. The news producers regularly decide which pictures and video footage are suitable for the wall display technology by involvement of the news editors. Sometimes, the operators of the wall screen put on the video clip or the news image. There is often opportunity for choice concerning the pictures for displaying on the interactive screen in the studio news

The worker has the skills to organise the footage. Who makes this?

The news producers or the news writers do not deal with the news footage, these aspects are more relevant with the footage editors' tasks in a different room. Usually, the editor's pictures or the cameraman have the responsibility to choose and take the right footage for the news stories. They have experience to organise the visual aspects of news.

For example the CG?

Sometimes they make mistakes writing the title, we know about this mistake and we have other workers who deal with this situation and problems to solve it.

The footage editors and the news editors do not have any professional experiences or creative skills in finding important footage to form good news packages. The shots have a great impact on maintaining consistent news and

creating value. Hence, the lack of such skills affects the content of news quality and the form of the production.

How do you see the situation in the GK newsroom? What is the key problem? And what is your comment on the newsroom system?

There is a problem of the system in this channel, this problem of the system started with accepting the workers to work here. First should the worker be accepted by the test, but here, sometimes they do test for some people and others they accepted without any test, this is a big problem that we faced when they started work in the newsroom as news crew.

Let's speak about relations between the newsroom crew

I believe that some of the workers cannot make differentiations between work colleagues and friends, for example when you criticise their work, they feel unhappy, this criticism is for improvement of the quality of the work. Because they think badly about this aspect there is a negative result if you criticise work of other practitioners. Thus, they don't accept any advice and information for doing their work of a better quality and they misunderstand your advice, also, this impacts on our relationship within the newsroom practice and then on our work.

The best way to manage your projects in the newsroom is to construct your relationships with other journalists. Also, you should be more sociable and companionable in conducting the news co-work and shared projects. Moreover, the news practices require creating more relationships with other members of the newsroom. Journalists without good relationships with their workmates are unable to manage their news projects efficiently.

The task of managing a news project - do you have any comment about the procedure of managing a news project? How do you do this in the newsroom?

the news producer conducted a short discussion at 08:00 with the news chief to create a news plan, headline, topics and news agenda. this type of conversation is not enough to make a good news plan for a long day covering news events.

Manage time in the newsroom - and tell me about news procedure in GK?

The news producer plays a vital role in finding a solution to the problems that face the journalists in their everyday practice and also, in finding new ideas, shaping the news programmes, creating plans and producing news items. The news producer attempts to support the news editor's crew, offering them news information, looking after their news production, organising the news script and searching for news stories. These extra tasks for the news producer make our assignments more complex and more difficult to manage. This makes us unable to focus on the operation of news production and the news quality.

Tell me about the role of the news producer in the newsroom

It is necessary to manage the morning conference and the newsroom crew should have regular meetings throughout the day to determine the key goals. The news staff should then be able to determine the priority of news and events on the daily news scripts. However, we don't have a daily meeting and news plan in the newsroom. There are no short or long plans for news coverage in the newsroom. Instead of the morning meeting, the senior news producer and chief of news department have a discussion about key information and news stories. It is necessary to arrange a daily plan in the newsroom in order to conduct, discuss and exchange ideas about the news practice to understand our daily tasks.

Tell me about your conversation in the newsroom

Because of the work pressure in the newsroom, we do not have time to take a rest or take a break, even at lunchtime. The main reason is the number of news programmes require 24 hours a day as well as a lack of professional journalists in dealing with news production. This has negative effects on the workflow of news practices, quality of news and productivity of news quality.

Work stress and pressure - in the newsroom how and when do you have this situation?

The key problems of the news reporters outside of the GK newsroom are relevant to many elements, such as, they do not have full understanding of how they edit the information, pictures and sound-bites, towards putting them

together into one package. They have less experience in treating news matters and in dealing with the ideas of news topics.

The goal of work in the newsroom and the journalists - can you tell me about how the journalists understand their news practice and goal of the network?

One of the biggest problems in GK is the journalist misunderstanding the key goals of the newsroom, such as the misinterpretation of the news reporters to treat the topics of the stories. These components create issues for the news producer to control the news practice. Then, the news producers spend a lot of time trying to solve the problems and attempting to provide the journalists with instructions about the matter, especially, news reporters from outside the GK newsroom. These reporters spend a lot of time checking the material and reworking some items. The unskilled, less knowledgeable journalists have trouble in dealing with some aspect of news practices in other departments. Usually, this creates too much work stress on the news producers

The small problems make barriers for the news producer's work especially if they have spent a lot of time fixing and solving this problem. This aspect is related to the lack of skills of the worker in the news crew, thus the news producer forgets his key job within the news crew and tries to solve other problems that face the news worker, and find a suitable solution for the problem.

For example, we will receive a news feed from the Kurdistan capital, first the news reporter will send the text to us and then will send the footage to us, so, first I will decide about the content of the news and select all important information in the story, this I will discuss with the news crew in the newsroom.

At the moment the tasks are easier than before, because in the past we write the news scripts, and this makes a lot of stress on our tasks and work, also, it makes us tired especially us news producers. Within the newsroom we have one person to make the news script, this person has now reduced some of the work stress on us. Sometimes, the work stress and workload on us just makes us think about managing the work, not on the quality of the news item.

In the news production, the character generator person (CG), is one of the most indispensable human actors involved in the operation of news production, particularly in dealing with visual aspects of the news story. The assignment of the CG operators in the GK newsroom involves fixing the news title/making the title, for the local, Iraqi and world news items, after preparing the news script, with PowerPoint software and creating news scripts with Microsoft Word. Then, the news script is sent to the news editing department and archive in order to find the picture and footage for the news items, usually the news script is prepared one hour before broadcasting time. If we have an emergency event or news or story development, this will be added to the news script immediately before the time of broadcast of the news programme.

How is collaboration and cooperation between the worker and news crew in the newsroom?

If we have a newcomer, such as a news editor, and work within the newsroom crew, us news producers agree and we decide to start work here within our news crew. At the same time, until he/she understands the environment of the work, we help the newcomer especially in the newsroom situation, especially in doing their work and tasks in the newsroom. Also, we help the newcomer to write the subtitle of news items, news editing and sometimes make news reports, all this support and help in order to avoid making a mistake in the news programme. Really, if there is no good relationship between the news crew here we can do the work in a good way and manage our work.

How many news producers do you have in GK ? Tell me about the news crew

About the newsroom crew staff, here we have three news producers for the political news programme, one news producer for the economic news programme and two news producers for the Krmanji dialect.

Related to our meeting in the newsroom

We have quarterly meetings, sometimes they take longer, maybe six months, once we can have a meeting about the development of the newsroom practice, this longer time of not holding a meeting goes back to the key reason which is

the administration don't want to listen to the workers and their demand to develop the work. So, one meeting does not solve why the meeting takes a long time and gathers all problems that face the work, then, the problem and two, then this aspect has an essential impact on our work in the newsroom practice and quality of the work.

Usually the content of the meeting in the newsroom focuses on the way of improving and producing good quality news items.

Tell me about the role of the news producer

Sometimes as producers we have the authority to remove a news item in the news script on limited topics, and sometimes the administration adds news without telling the news producer, this means, as producers we are not free to put or remove or add some sort of news on the news script. This aspect is more related to the founder of the channel and political aspect of the PUK Party. As journalists in the GK newsroom we should show commitment to the policy of the PUK Party especially the content of the news story and report.

Sometime as producer I remove some news that is related to the ceremony news and events

We need to make a better system of work in the newsroom. We need to establish a group of professional journalists to organise and produce news in a good way, the gap of not holding a meeting in the newsroom has impacted on our activity and quality of news work, we should solve this situation. We should have a long-term and short-term plan to conduct news activity in the newsroom. Also, there is no staff or news consultant to provide the news crew with more accurate information related to the event and stories. These aspects help the news crew to produce good quality news items. Actually we have crises of professional journalists in the newsroom, we don't have journalists who have good skills to deal with news items. For instance we don't have journalists who have good skills to deal with the footage, edit information and write to pictures.

Tell me about the situation of journalists in GK

The big problem here relates to the salary of the worker in the newsroom, the journalists here don't have a good salary so this also, is a big barriers front of the work and produces good quality news items in the newsroom. The reduction of the number of journalists in the newsroom also, impacted our work here and the lack of experience of some journalists in dealing with their news practice made a lot of work stress in the GK newsroom channel - this aspect makes our work more difficult and loads on the procedure of news production, sometimes we spend a lot of time deciding about whether a single news item will be broadcasted or not, this makes our work more stressful, also, the news reporters, do not produce good quality news reports. Also, we spend a lot of time fixing their work problems. They cannot manage their work very well and produce good quality content and forms for the reports.

As news producer what do you manage here?

Firstly, I start my work at 8:00 in the newsroom. I take a look at the news script the day before, and then check the news reporters' emails, then check the news source and updates and news story development, checking the website in order to gather information to make news story development.

Usually, I just take a look at the news website, and also, take a look at other shift news material, I take a look at the news title, subtitle, also, the news reporters, and I take a look at breaking news, the news bar, and sometimes I take a look at news development. We also update news story information and later I check the news headlines, wall screen pictures and footage, news footage. After checking all news procedures we write up the news script, for the first news programme at 8:00 in the morning. Also, we do some editing on the information of the news story especially in the time of the news. We do this task usually through the link on media; media link is the network between some news crewmembers to check the information, also, we check the news report and cut some parts of the report to make it shorter such as voiceover length or sound-bite and interviews. Usually we do this task in the editing department, this task is helpful to organise our scriptwriting but, we have work stress in this respect and dealing with this sort of problem as news producers. Also, this aspect, such as making the news

report shorter creates a problem for us news producers with the news reporter outside of the station. Depending on the decision of the administration, the time limit for the news reporter is 3 minutes ... not longer.

We should have short news reports, sometimes we look to produce shorter than 2 minutes, but usually the news reporter produces more than 3 minutes. Actually we have a problem with the news reporter when they repeat the speech of the interviewee in the report. In the newsroom we try to remove some of the repeated information in the news report. Usually, you can note this problem with all news reports when we receive the news report from outside the station.

Tell me about the news anchor

Related to the news anchor in the news programme, sometimes they have information about the content of the news and they may be able to ask the news guests directly. Sometimes the news anchor doesn't have any idea about the news interview, so as producers we will provide them with information and questions. Actually this aspect depends on the news anchor and how they follow the news story and development without their time/work. But usually when they know about the news anchor, he/she has information about the news story and how they ask questions. Usually the department of the relationship in the channel takes care to find a host for the news studio, it is just our work that is limited to organising the questions and how we present the information to audiences.

If we know that the news anchor cannot control and manage the news guests within the news studio, especially relating to asking questions and organising their information related to the news host, we help him/her to ask questions and manage their tasks in the newsroom.

For example, sometimes we need to add some news stories for the news script so I go to the news control room and have a discussion with the news director in this workplace where I add the news and tell the news anchor about the change that has happened in the news script. Usually we do this in the live broadcasting time, at this moment as news producer I attend the news control

room to look after the procedure and how they manage the change in the news script.

Adding news and news producer

As news producer in the newsroom we take care of the attendance of the worker in everyday practice, this aspect makes a lot of work stress on the news producer, especially if someone is absent, so the news producer should look to find someone to fill this gap of the work within the newsroom practice.

Tell me about the role of the news producers

Relating to the location of the news producer in the newsroom, it is not good to look after the workers in the newsroom, sometimes you don't know who is attending their work and in that time we should do some checking, and spend time looking at this aspect. This is another aspect of work stress on the news producer, which means the news producer takes a look at the quality of news production, newsroom procedure and takes a look at who attends in the newsroom; this is a lot of checking processes. Absence of the news worker makes a big problem for the news producer so we should think about this also, for instance if the photo wall screen worker is absent we should think about an alternative to this person, and immediately we should think about filling this gap directly in order to manage the news operation in a good way. Also, we organise our daily tasks through a table where each worker has informed us about the day and time of work in the newsroom. Usually the news producer checks the table in the morning, the table includes the time of work, news anchor, news editor, CG person, news producer shift, news bar person, scriptwriter person and photo wall screen. For the process worker checking attendance the news producer spends the first 20 minutes on this every day and this is another task.

Tell me about the relationship of the news anchor and other news crew or producer

We have a good relationship with the news anchor especially when we discuss how they can present the news and style of asking questions and deal with the

host. I see there is a good relationship between the news producer and news anchor in the newsroom, this aspect is a positive point for our news procedure, news organisation tasks and news production. Sometimes, the news anchor has a discussion with the news editor about the news content checking content, and editing style, this aspect of their work is good to improve the relationships between the workers. We rarely see this type of discussion.

What do you think about the newsroom system non-automation?

Newsroom system non-automation...is the biggest problem for the news producer and news worker here, if we have this system in the news we will be able to increase the amount of news production and make it better than now.

Tell me about the skill of journalists in using computers

The news anchors have different levels of skills in using the computer to conduct news practice, for example some of the news anchors are able to manage their daily work whilst others are unable. The skills of the journalists in participating in the news programmes and commenting on the news events are specific and crucial to their job, however, not all journalists have the same level of skills. The news presenters are unable to make questions; manage host debates; or even edit content of news stories in emergency situations and manage live events. Furthermore, the field news producer referred to the skills of the presenter as limited, especially the newcomer (news anchor).

Skills of news workers for some elements of the news story?

We don't have experience and skills in dealing with sound and visual aspects of the news item. These experiences have different levels between the news workers here.

Do you have graphics in the newsroom?

The information graphics are not available in the news programme. The reason for this is the costs of producing news graphics and providing professional crew in the channel is too high. We rarely use simple graphics in our production.

Sometimes we use the info-graphics in the news story, especially in the in-house report, this sort of news item needs info-graphics in order to treat some aspects

of this type of report. This aspect in the newsroom is not developed very well because of lack of professional staff of graphic art in the channel.

Appendix (5), letter of consent for the journalists and conducting in-depth interviews.

I confirm and fully understand that I have read the letter before I conduct the interview that targets the research project about the Kurdish newsroom. I understand the information that is contained in the sheet above and I understand that this data collection will be used in the PhD research project. The subject of this interview relates to the newsroom practice and everyday life of journalists within their news production process.

I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions. I understand that I have a right to stop this interview if I don't want to answer the questions and I am free as the interviewee to withdraw from this interview at any time. I understand that my participation in the research project is voluntary and my information in this project will be helpful for practitioners in the newsroom. I have read this consent letter and freely, I agree to take part in this research project to provide the researcher information related to the news practice and news production.

I hereby freely agree to sign and provide my full name or pseudonym to indicate my consent.

This letter has been signed in the city of Sulaimani, Iraq-Kurdistan

Name of interviewee:

Date:

Signature:

Name of Researcher:

Date:

Signature: